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TO

VOLUME I.

EMBRACING

MONTHLY BULLETINS FROM OCTOBER, 1893, TO
JUNE, 1894, INCLUSIVE.

*Pan American union
Bulletin*

BUREAU OF THE AMERICAN REPUBLICS.
WASHINGTON, U. S. A.

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BUREAU OF AMERICAN REPUBLICS,
WASHINGTON, U. S. A.

COFFEE IN AMERICA.

METHODS OF PRODUCTION

AND

FACILITIES FOR SUCCESSFUL CULTIVATION

IN

MEXICO, THE CENTRAL AMERICAN STATES, BRAZIL AND OTHER
SOUTH AMERICAN COUNTRIES, AND THE WEST INDIES.

BUREAU OF THE AMERICAN REPUBLICS,
NO. 2 LAFAYETTE SQUARE, WASHINGTON, D. C., U. S. A.

Director.—CLINTON FURBISH.

Secretary.—FREDERIC EMORY.

COFFEE IN AMERICA.

Throughout the world there is a constant and rapid increase in the consumption of coffee. Although there has been a marked increase in the production of this berry in Central and South American countries, the rising prices indicate that the supply is still below the demand. These facts have naturally turned attention to this industry in those regions where the coffee plant thrives, and has prompted many inquiries from persons seeking investment regarding favorable locations, prices of lands and general information upon the subject. To answer fully the many inquiries received at this Bureau on this subject, is the object of this bulletin. Incidentally, the coffee production of the Old World is noted, but attention is chiefly directed to the lands, climates, soils and other natural conditions of growth of plant, methods of propagation, cultivation, handling and marketing of this product in the countries on this Continent, to which it seems probable the world must look for any increase in the present supply.

SOURCES OF SUPPLY.

The coffee plant, indigenous to Asia and Africa, has found its true habitat in the New World, where its production is already many times greater than in the Eastern Continent. Messrs. Schoffer & Co., of Rotterdam, estimated the world's total production in 1884 at 681,314 tons, of which Brazil alone produced 371,429 tons, or 61,544 tons more than one-half the entire product. Java, Sumatra and Celebes produced 108,743 tons. Since that time the proportion in favor of America has constantly and immensely increased; the Old World having hardly increased its production, while in Brazil the crop in 1892 reached about 500,000 tons, and the other American countries had shown, in certain cases, a still greater percentage of growth.

The amount of coffee produced in the world has been steadily

increasing for many years. The following table shows the production by countries for the ten years prior to 1885 :

	Cwt.
French Possessions in Africa and West Indies	16,995
Menado	18,450
Mocha	19,054
Cuba	24,000
Salvador	92,000
Colombia	98,204
Guatemala	120,716
Costa Rica	185,472
Puerto Rico	192,645
Venezuela	230,000
East Indies	412,000
Santo Domingo	606,000
Ceylon	850,000
Java and Sumatra	1,415,105
Total	4,280,641
Brazil	4,250,000

The coffee product of the world for 1888-89 was estimated as follows by the two respective authorities :

The New York Chamber of Commerce gives :

	Pounds.
Brazil	812,000,000
Java	96,824,000
Padang, Sumatra	12,320,000
Celebes, Ceylon, India and Manila	62,720,000
Africa and Mocha	12,320,000
Mexico and Central America	80,640,000
Venezuela	78,400,000
West Indies	94,304,000
Total	1,249,528,000

The *American Grocer* estimates :

Brazil	892,944,000
Other American countries	301,123,744
East India and Africa	220,487,840
Total	1,414,555,584

The latter authority gives the following statement of the coffee situation at the close of the year ending June 30, 1893 :

The trade year closed June 30 with deliveries of all kinds in the United States, in comparison with the preceding year, as follows :

Year.	Bags.
1892-93.....	4,398,549
1891-92.....	4,411,832

Decrease in 1892-93.....	13,283
--------------------------	--------

This shows great steadiness of consumption, and should be considered satisfactory, in view of the high cost ruling and trade disturbances.

In Europe, however, we find an increase in deliveries, those at the eight principal ports comparing as follows :

Year.	Bags.
1892-93.....	6,547,679
1891-92.....	6,392,719

Increase in 1892-93.....	154,960
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Bringing the deliveries of Europe and the United States together, we have the following comparative statement :

Year.	United States.	Europe.	Total.
1892-93.....	4,398,549	6,547,679	10,946,228
1891-92.....	4,411,832	6,392,719	10,804,551

These figures show annual deliveries for the trade year of, in round numbers, 11,000,000 bags, or 647,000 tons, which may be accepted as the minimum requirements of Europe and the United States.

For the four calendar years ending December 31, 1892, the average annual deliveries in Europe and the United States were 651,384 tons.

It is fair, with these figures as a basis, to estimate that the world requires an annual supply of 650,000 to 660,000 tons (11,050,000 to 11,220,000 bags), and until the production exceeds this quantity, there is not much chance of a return to the low prices of 1882 to 1886.

THE BRAZIL CROP.

The receipts of coffee in Rio and Santos, for the trade year ending June 30, compare with preceding years as follows :

	Rio.	Santos.	Total.
	<i>Bags.</i>	<i>Bags.</i>	<i>Bags.</i>
1892-93.....	2,989,000	3,213,000	6,202,000
1891-92.....	3,722,000	3,675,000	7,397,000
1890-91.....	2,413,000	2,945,000	5,358,000
1889-90.....	2,389,000	1,871,000	4,260,000
1888-89.....	4,189,000	2,638,000	6,827,000
1887-88.....	1,912,000	1,121,000	3,033,000
1886-87.....	3,497,000	2,581,000	6,078,000

Here we have a decrease in receipts at Rio and Santos in 1892-93, as compared with 1891-92, of 1,195,000 bags, a deficit of over 10 per cent of the world's coffee requirements.

The average annual receipts at the two ports of Brazil for five years were 6,008,800 bags, so that the crop of 1892-93 was a full average.

The exports from Rio and Santos for the year ending June 30 and the preceding four years were as follows:

	To United States.	To Europe.	Total Exports.
1892-93—Rio.....	1,972,000	953,000	} 6,295,000
Santos.....	1,102,000	2,268,000	
1891-92—Rio.....	2,556,000	1,148,000	} 7,267,000
Santos.....	997,000	2,556,000	
1890-91—Rio.....	1,556,000	750,000	} 5,537,000
Santos.....	798,000	2,253,000	
1889-90—Rio.....	1,767,000	724,000	} 4,570,000
Santos.....	512,000	1,567,000	
1888-89—Rio.....	2,332,000	1,542,000	} 6,431,000
Santos.....	533,000	2,024,000	

The above shows average yearly exports for five years of 6,020,000 bags, which is 275,000 bags below the exports of 1892-93.

Brazil furnishes about 54½ per cent of the world's requirement of coffee, taking the average exports for five years as a basis of computation.

It is apparent that any decrease in the Brazil supply below a crop permitting of minimum exports of 6,000,000 bags, or 54½ per cent of the world's total supply, means high prices until other producing countries extend their area under coffee to an extent great enough to produce and export an average of at least one-half of the world's requirements—unless Brazil has other years of exceptional yield, as in 1891-92, when the receipts at Rio and Santos went 1,388,200 bags beyond the yearly average.

Coffee culture is being pushed in Mexico, Central America and the United States of Colombia, but new plantations have not yet reached a point where they are able to push exports abreast of Brazil, and until that time is reached high prices must rule. Consumption has not increased since 1886 as much as it should, in view of the increase in population and the prosperous condition of the United States. It requires the stimulus of low prices and exceptional prosperity to advance coffee consumption in the old-time ratio of about 9 per cent per annum.

THE MOVEMENT IN 1892-93.

Taking the official report of the New York Coffee Exchange, we find the position of coffee and movement in 1892-93 to be as follows:

In the United States—

Stocks, July 1, 1892.....	525,889
Arrivals in United States, all kinds.....	4,283,239
Total supply.....	4,809,128
Less stocks, July 1, 1893.....	410,579
Deliveries, 1892-93.....	4,398,549

In Europe—

Stocks, July 1, 1892.....	1,451,134
Arrivals in Europe.....	6,987,191
Total supply.....	8,438,325
Less stocks, July 1, 1893.....	1,890,039
Deliveries, 1892-93.....	6,547,679

In United States and Europe—

Stocks, July 1, 1892.....	1,977,023
Arrivals in Europe, 1892-93.....	6,987,191
Arrivals in the United States, 1892-93.....	4,283,239
Total supply, 1892-93.....	13,247,453
Less stocks, July 1, 1893.....	2,300,618
Deliveries, 1892-93.....	10,946,835

The total sales for future delivery on the New York Coffee Exchange amounted to 7,911,500 bags for the year ended June 30, 1893, compared with 6,949,000 in 1891-92, 7,700,750 bags in 1890-91, and 13,011,500 bags in 1889-90. The largest transactions for any one month were in April, when they reached 1,175,750 bags. More than one-half of the year's business was done during the first six months of the trade year, when transactions covered 4,157,250 bags against 3,754,250 bags for the six months ended June 30, 1893. The highest price paid was 17.70 cents for March delivery in January, 1893, and the lowest was 11.75 cents for October, November and December delivery in July last.

The average monthly prices of No. 7 Rio for the trade year ended June 30, 1893, based on actual sales, were as follows:

1892.	Cents.	1893.	Cents.
July.....	13.15	January.....	17.19
August.....	13.86	February.....	18.03
September.....	15.02	March.....	17.71
October.....	16.01	April.....	15.85
November.....	16.59	May.....	15.72
December.....	16.77	June.....	16.68

Average for trade year, 16.05 cents.

It is certain that any decrease in the Brazil supply of 1893-94, below 6,000,000 bags, means a heavy inroad upon the world's stocks, with the situation favorable for the producers. The stocks, July 1, in Europe and the United States, were 2,300,618 bags, against 1,997,023 bags, July 1, 1892, an increase of 323,595 bags. In the United States there was a decrease as compared with the previous year of 115,310 bags, while Europe shows an increase of 438,905 bags.

Any view of the situation is subject to modification, owing to the financial troubles which have unsettled the markets of the world. The liquidation in South America, Australia, England and this country, has not been completed, and until it is, no one can predict with any approach to certainty what the course of the coffee market will be in 1893-94. Credits have as much to do with the situation as crops.

VARIETIES OF COFFEE.

The coffee plant (*genus coffea*) indigenous to Africa and South-western Asia possesses several more or less known varieties, viz :

Arabian Coffee : Mocha, Myrtle, Aden and Bastard.

Moorish Coffee : Marron of Reunion.

Monrovia Coffee : Coffee of Gabon.

Laurine Coffee.

Yellow Coffee (*café amarelo*): The richest of all in caffeine, with yellow berries.

Red Coffee (*café vermelho*): The common coffee of Brazil, Colombia, Guatemala, Venezuela, Nicaragua, Salvador, Costa Rica and Mexico. The berries of this coffee are red when full grown.

The subdivisions of the above-named varieties are quite numerous, some of them being based rather on the district where they are produced, or the port whence they are shipped, than on any real difference in quality or appearance.

Thus we have for Brazil, the Rio Coffee, also subdivided according to class or treatment; Santos Coffee, the coffee of Minas, that of Bahia, of Ceará, etc.

For the West Indies there are the Haiti, Jamaica, Puerto Rico, Martinique, etc. For Venezuela, the Laguayra and Maracaibo. For Bolivia, the Yungas. Central America presents as subdivisions the Guatemala ordinary and Guatemala *gragé*; the Costa Rica, ordinary and *gragé*, etc. All these classes or subdivisions, however, belong to the Red Coffee variety.

It is a well-established fact that the quality of coffee—that is, its flavor and aroma—is improved by keeping, and it is thought to be at its best at eight years, provided it has been kept in a perfectly dry place and atmosphere. As it is sold by weight, and as it loses by the evaporation of the water contained in the freshly prepared beans, dealers prefer to sell it as green as possible. When at its best, its color should be a pale yellow, for the usual variety; and greenness of color is an evidence of immaturity or of artificial coloring. Such coffee should be avoided.

The following table will show the great variation in the size and weight of coffee from different sources:

WEIGHT.—DENSITIES OF OLD COFFEE.

Origin.	Date of crop.	Condition of the grains.	Weight per litre.	Number of grains to the decilitre.
			<i>Grammes</i>	
Mocha (<i>Admiral de Rigny</i>).	1828	Grains regular, fine.	500	510
Mocha of Aden.....	1874	Much mixed.....	606	554
Zanzibar Mocha.....	1874	Much mixed.....	600	476
Java .....	.....	Regular, large....	445	338
Reunion	1869	Fine, pointed at the ends.	630	488
Brazil	1872	Regular, large....	522	294
Brazil (Rio) { No. 16..	1867 }	Regular, large. {	460	300
{ No. 17..	1871 }		544	292
{ No. 18..	1872 }		586	354
Venezuela.....	1865	Ovoid, medium ...	654	400
San Salvador.....	1873	Ovoid, medium ...	662,	.....
Cochin Chira.....	Very Dry. {	Small	614	544
Rio Nunez.....		Small	580	618
Nossi Be.....		Medium	584	432
Nossi Be (<i>Wild</i>).....		Ovoid, very small.	440	752
Gabon.....		Large, irregular..	490	336
Caledonia.....		Medium	570	442
Ceylon	Medium Dry..	Fine.....	580	452
Brazil (<i>Espirito Santo</i>)	1875	Large (<i>artificially dried</i>).	567	318

Its loss of weight by drying is shown by the following—the density being:

	Grammes.
For eight years.....	4.60
For four years.....	5.44
For three years.....	5.86

Since 1885 the production has increased enormously. Brazil alone produced for exportation in 1891-92, 7,000,000 bags of 132 pounds each, showing that its exports for this year exceeded the total production in 1888-89 by over 100,000,000 pounds. The exports of coffee from Mexico for 1888-89 were to the amount of \$3,886,034, and \$1,019,066 for the first six months of 1890-91. Costa Rica produced, in 1889-90, 33,363,200 pounds; Venezuela, 95,170,272; Colombia exported in the latter year to the value of \$4,262,030, and Guatemala 50,859,900 pounds, valued at \$2,714,981. Nicaragua produced in 1890-91 11,300,000 pounds.

While the total production of the world has thus been increasing, the ratio of this increase has been far greater in the countries that make up Latin America than in the coffee producing districts of the Old World, where the once famed plantations of Arabia have dwindled to an insignificant production, and the difficulties of cultivation in Java have increased. It is in the former, therefore, that the steadily growing demands shown by the constantly increasing price must stimulate the opening of new fields.

RANGE OF PRODUCTION.

The plant is a native of the tropics and can be cultivated only in regions free from frost, though excessive heat is inimical to a healthy growth or good product. Thus, in the low, hot lands of the entire coast of the Gulf of Mexico, Caribbean Sea and South Atlantic, its cultivation is not attempted; and it is only back on the high lands and hill ranges that successful plantations are found.

Mexico is the most northern and Paraguay the most southern of the countries of this Continent, where its cultivation has been profitably pursued, and the area of territory in each of the countries where it is grown that can be successfully devoted to the production of coffee is much less than is generally supposed.

The following information as to this industry has been gained from those having personal knowledge of coffee culture in the different localities:

MEXICO.

In regard to coffee raising in Mexico, Maj. J. D. Warner, of the City of Mexico, says, in the *Mexican Trader*, under recent date :

Coffee raising in Mexico is yet in its infancy, but it pays from 100 to 200 per cent on the capital invested, the Mexican coffee being of a superior quality and ranking among the best in the world. Coffee is worth at present, at the plantation, from 20 to 25 cents per pound, while the annual cost of production averages only 7 cents per pound, the coffee being sold for cash only, and never commissioned out to find a market. Good coffee land with an exceptional title can be bought for from \$5 to \$100 an acre, according to location and condition, and an acre will grow 1000 trees.

He states that the coffee plantations of Mexico are never attacked by any disease or parasite; but in a document published by the Department of Industry and Commerce of that country, in 1883, among other insects injurious to the coffee plant, one, the *gallina ciega*, is mentioned as attacking the roots and doing much damage to the plant.

The altitude recommended for the establishment of plantations is from 1000 to 3000 feet above the level of the sea, and such localities are the healthiest to be found in the tropics, being above the level where yellow fever and malarious diseases usually prevail.

The gathering of the crop is largely done by women and children, and labor is not difficult to obtain. Major Warner states that the average of wages paid in the coffee raising districts is 43 $\frac{3}{4}$ cents per day.

Señor Romero, Minister of Mexico in the United States, in a work on coffee culture published in 1875, estimates the cost of each coffee tree, four years from planting, at about 11 cents, including price of land and wages; that the tree in its fourth year will yield two pounds of coffee, which, at a minimum price of 10 cents, makes 20 cents per tree. The expense of gathering and preparation for market he puts at 5 cents, thus leaving a net profit of 15 cents per tree. With 1000 trees per acre, the net profit per acre is seen to be \$150 for the fourth year. The yield increases, ordinarily, to the seventh or eighth year.

The following remarks and directions in relation to coffee planting in Mexico are taken in substance from the government publication referred to above, and may, with some unimportant modifications, be applied to the cultivation of coffee in all American countries that produce it :

CULTIVATION OF COFFEE.

The soil most generally suited for coffee plantations is a friable, sandy, or even gravelly one, though the presence of clay in considerable amount is not objectionable, when the drainage is good ; but soils that retain standing water, or those formed chiefly of alluvium, while they produce vigorous trees, do not yield coffee of good quality. The best soils are sufficiently deep to allow the roots to penetrate vertically to a distance of three feet or more, and should not rest on a substratum of solid rock or impermeable clay, as the moisture would be too long retained, and the plants injured. For this reason it is always advisable, in selecting ground for a coffee plantation, to make sure that the above conditions, as nearly as possible, exist ; otherwise disappointment and failure may result.

It must not be supposed, however, that moisture is not necessary for the healthy growth and production of plant and fruit ; for unless there is abundant moisture afforded by nature, in the way of rains and dews, artificial irrigation will be needed. The essential thing is that the moisture pass freely through the soil and not be retained standing about the roots of the plant.

The best plantations are made on virgin soil, from which a forest growth has been removed by cutting the trees and burning the branches and undergrowth on the ground, as the ashes are an excellent fertilizer, whose properties are lasting. Hill-sides are usually selected to secure better drainage, and eastern exposures are preferred, though not essential to the growth of productive plantations. Next to eastern, the western slopes are preferable, as on either of these the growing plants are not exposed all day to the direct rays of the sun, as is the case with northern and southern exposures.

Many planters are of the opinion that burning over the ground injures it, and no doubt this is the case if the whole forest growth be burned, as is sometimes done ; but when only the branches of the

fallen trees and the undergrowth are consumed by the fire, the general opinion is that the ashes are valuable as a fertilizer for the coffee plants. In Brazil, the fallen trunks of such trees as make valuable timber are sawed by hand by gangs of men, who go about the country for that purpose, since saw-mills are scarce, and the transportation of the heavy hard-wood logs would be almost impossible. Some of these woods are almost as hard as iron, and the sawing is difficult and very slow.

The plants for the future plantation are raised either on the spot where they are to grow, or in seed-beds, to be afterwards transplanted to their permanent place. The latter mode is that most generally preferred, as by it plants without defect may be selected, and of uniform size, which is not possible under the former system.

If the former method be chosen, however, the ground, cleaned of all growth, is staked off in lines, in which the seeds are planted, a few to each hill, at from six to eight feet apart. The rows are not so far apart as the hills, for these are arranged in the quincunx order—that is, three hills form the vertices of an equilateral triangle, two of them being in one line and the third, or vertex of the triangle, being in the next line. The distance apart of the plants, then, being represented by a , the distance of the lines from each other will be the square root of $\frac{3}{4}a$. This arrangement gives each plant the same root area as to every other one, and in situations when the plough can be used, allows cultivation in three directions. Of course the soil where the seeds are deposited must be thoroughly and deeply stirred. This is done by long, sharp spades, made especially for the purpose, and the holes are dug some two feet square and to about the same depth, in order that the roots may easily penetrate the soil in all directions. The earth removed from the hole is so replaced that what was at the top shall be at the bottom.

As the young plants need to be protected from the burning rays of the sun, banana plants, which are of very rapid growth, are set at the centers of the triangular spaces; or, as the banana propagates so rapidly and is so difficult to extirpate, when the coffee plants require the whole ground, many prefer to plant the wild fig, or some other plant easier to eradicate. In Brazil it is usual to plant a kind of tall coarse pea, called *guando*, which shades the ground effectually, prevents the soil from washing away, and is allowed to fall and decay

on the ground. This plant is selected because it is rich in potash and affords excellent manure for the growing coffee plants.

As the ground rarely admits of cultivation with the plow, the soil is kept free from weeds by the use of heavy, sharp hoes, and the bushes that spring up are cut down with mattocks or grubbers; all the work being done by hand. During the first season, particularly, it is important that all weeds and grass be destroyed before going to seed, thus preventing new generations from appearing in subsequent years to increase the labor of cultivation. The burning of the brush on the ground, in the preparation of the future plantation, destroys many seeds that would otherwise produce weeds.

After the seed is planted, if no rain falls, irrigation will be necessary to prevent the earth about the germinating seed from drying, as in that stage moisture is necessary to the life of the embryo plant. Care should be taken, however, that the irrigation be not excessive, as too much water is as injurious as too little. After the roots have formed and penetrated deep into the soil, the plant resists drought more easily. Of course, if several seeds germinate, the most vigorous plant is preserved and the rest removed, after a short time, or before the roots of various plants have become mingled together, so that in removing the others the roots of the one selected to remain shall not be disturbed.

The propagation of the plants in seed beds, which, as has been said, is the course usually pursued, is as follows: A spot of ground of the same quality as that of the proposed plantation is selected; since, if the seed bed be more fertile than the soil of the plantation, the young plants will start off with a vigorous growth, which will be injuriously checked by transplanting to a soil less rich. At the same time, the seed bed should not be lacking in the elements of vigorous growth, as puny plants rarely become vigorous, even when removed to a very fertile soil. Very much, then, depends on a proper relation of fertility between the soil of seed bed and that of the permanent plantation.

The location of the bed should be such that it will receive the rays of the sun during the forenoon, and remain in comparative shade after midday. The seed bed is thoroughly prepared by stirring and inverting the soil, and the seeds may be planted in ridges or in boxes set in the ground, having not less than ten inches of earth. Seeds

that are perfectly sound and regular in shape and size should be selected and planted about two and a half inches apart. They should be covered with vegetable mold to the depth of about three-fourths of an inch, and the whole seed bed well sprinkled from a watering pot immediately after the planting.

All grass and weeds must be carefully removed from the bed as they appear, and the earth watered whenever it appears dry, which is best done late in the afternoon. Frequent light sprinklings, which keep the soil in an even condition of moisture, are preferable to profuse watering at long intervals, which makes the earth alternately too wet and too dry.

The young plants begin to appear in about a month, and in ten or twelve months are ready for transplanting, being, at that age, from twelve to sixteen inches high. The banana or other plants intended to shade the young coffee trees should be set out before the transplanting of the latter, and given time to become large enough to furnish shade from the first. The cultivation of the new plantation will consist in keeping down the weeds and grass, and if these should grow to considerable size it is better to cut them down, allow them to dry, and burn them in piles, than to cover them with earth. Many insects and their eggs, or larvæ, are destroyed by the burning, that would not be killed by burying them.

The transplanting is done when the ground is moist from recent rains, and if a ball of earth be taken up with the roots of the young plant, it will start off more quickly and vigorously in its new place. If the plants destined to furnish shade have not been previously planted, it will be necessary to stick a branch with leaves in the ground beside the young plant, so as to shade it until it takes new root; but these branches should not be left there longer than necessary, as they become the breeding place of insects which are injurious to the coffee plant.

If the roots of the plants are torn in removal, they should be cut obliquely and smoothly above the wound. The plants can be conveniently carried from the seed bed to the plantation in large baskets, whose bottoms are covered with moist earth. The direct rays of the sun should not be allowed to fall on the plants during their transportation and planting. The plants should be set at the same depth as

in the seed bed, and the ground about them watered in the afternoon of the day of transplanting.

In addition to keeping the new plantation free from grass and weeds, the suckers or shoots which will push at the base of the plant should be removed, as well as all diseased branches and such as lie on the ground. Some of the plants will die, and these must be replaced by the most vigorous ones from the seed bed.

Some planters think it best to pinch off the terminal buds of the top boughs when the plants have reached a height of five or six feet. This is to prevent the tree from growing too high for the convenient gathering of the berries. Others believe that this process injures the quality of the coffee, an opinion apparently ill-founded, since the general practice is to top the trees, which makes them more stocky and the lateral branches stronger. In the forest, surrounded by other trees, the coffee tree grows tall and straggling and produces but little.

A Mexican authority declares that the coffee tree will not bear pruning, but in Brazil and other countries it is freely practiced. The distance of the plants from each other varies considerably in different countries and localities. In Costa Rica it is recommended to give them a distance of ten feet. In Brazil, from ten to twelve feet is the usual distance, while in Mexico six, seven or eight feet seems to be preferred. No doubt the size of the tree at maturity is that which determines the proper distance under the system of pruning that is practiced. A distance of ten feet in the quincunx order of planting will give about 500 trees to the acre.

Generally, if the soil of the plantation is originally of sufficient fertility, little or no manures will be required, if the leaves that fall annually from the trees, and vegetable growth that is raised between the rows are turned under the soil to decay; but where manures are necessary or desirable, the vegetable should be preferred to the animal. Ashes are an excellent application, as the coffee plant is a consumer of potash.

If the ground of the plantation is very steep and the soil inclined to be washed away, it is better not to keep it too clean of grass and weeds, as these retain the earth by their roots and stems that lie on the ground; and sometimes diagonal ditches must be made to carry

off the excess of water more slowly than it would descend the slope if unobstructed.

Although there are few plants less exposed to the attacks of insects and disease, the coffee has certain enemies, both animal and fungus, which require attention, but none of these present great difficulties in overcoming. A growth of moss is probably indicative of too much moisture and a generally feeble condition. Very few specific remedies are employed against insects, which are rarely very formidable.

The trees begin to produce in the fourth year, and in the seventh reach their full capacity. A coffee plantation favorably located and properly cared for will continue in profitable bearing some forty years.

Mexican coffee is considered to be milder and, in some respects, superior to the product of some of the other coffee producing countries. There remain still in Mexico vast bodies of virgin land. United States Consul Sampson, at Paso del Norte, in a report dated June 17, 1891, represents that nearly one-third of the lands of the Republic are unoccupied, the greater part of which are available for agricultural and pastoral purposes. Among this are many tracts which may be profitably devoted to coffee culture. Any settler may obtain as many as 6000 acres of government lands at prices varying from 12 cents to \$1.80 per acre. The Mexican government offers every encouragement to actual settlers. To settlers in colonies, as much as 247 acres are granted free, and the colonies will receive a title to the same after having cultivated the land for five consecutive years. The settlers are also exempted for the period of ten years from military service, from all taxes except municipal, from all import or domestic duties on articles imported for their own use, and from export duties on their products. Public lands may be obtained in any part of the Republic where they are situated, except within sixty miles from the frontier. In sections suitable for coffee culture, tobacco, vanilla, ramie, Indian corn, etc., may also be raised.

GUATEMALA.

The production of coffee in Guatemala is steadily, though not rapidly, increasing. In 1887, the production was 48,539,267 pounds,

and in 1891 it had advanced to 52,197,853 pounds. Between 1861 and 1870, only 11,481,420 pounds were exported, but between 1871 and 1883 the exports of coffee reached 293,274,971 pounds.

The temperature best suited to the healthy growth and abundant production of the plant in Guatemala is between 60° and 90° Fahrenheit, the former being rather too cool and the latter too warm for the best results. In the lands whose altitude is from 1500 to 2000 feet, and where the ruling temperature approaches the latter limit, the young plants must be shaded, in new plantations, by tall and rapidly growing plants, otherwise their growth is unhealthy, as is betrayed by the small size and yellowish appearance of the leaves.

For the purpose of shading the young trees, the banana is very generally employed; as it not only affords abundant shade, but produces paying crops of its own. After one or two seasons' growth, the coffee plants need no further extraneous shade.

In districts whose mean elevation is 4500 feet, plantations must be sheltered from the cold north winds, which, during December, January and February, blow almost continuously, and destroy plantations exposed to their full force. A range of hills to the north of and overlooking the plantation is the best natural protection that can be found, but in the absence of this, it is customary, when the mercury at night falls to 60°, to burn heaps of rubbish mixed with pitch on the north side of the plantation, and the dense smoke, drifting over and through the rows of trees, furnishes complete protection from the effects of the cold.

The scarcity of labor has been, and continues to be, the main obstacle to a rapid increase in the coffee product in the extensive lands of Guatemala so well suited to the growth of the plant.

Mr. Audly Gosling, in a report made to the British government in 1892, says that lands suitable for coffee plantations may still be had at moderate prices, and that the production would be increased three or four times if sufficient laborers could be obtained for new plantations. The lands most suitable for plantations and most favorably situated with respect to centers of shipment naturally command the highest prices.

For the better and more favorably located lands, the government price is about \$80 per caballeria (120 acres), \$40 to be paid to the authorized surveyor; making, in all, about \$1 per acre. This,

however, is the price when there is no competition among bidders. Mr. Gosling thinks that the most inviting fields are the districts more remote from the cities, and that in these, well-directed energy and moderate capital may expect abundant rewards from coffee raising.

The manner of raising the plants and setting them in the permanent plantations is almost the same as in Mexico, and the same cultivation is given to the growing trees. The critical season for the future crop is the blooming period. A heavy rainfall, while the trees are in flower, will seriously damage the plants, washing away the pollen and thus preventing fructification. This period lasts three or four days, when the blossoms fall and the "cherry," as it is called, begins to appear. This "cherry" reaches maturity in October and is ready for gathering and "pulping"—that is, for the removal of the outer shell and pulp, after which it is washed and carried to dry, spread out in brick-paved yards exposed to the sun.

The methods employed for the handling of the berries after gathering may be greatly improved, and when the modern machinery and drying apparatus, such as are used on the larger plantations in Brazil, shall have been introduced, the Guatemala product will be greatly improved, both in quality and amount. The profit, too, of the culture, in a country where labor is so scarce, must depend greatly on the employment of all means which will economize manual labor.

German settlers have taken up coffee lands to such an extent that it is estimated that fully one-fifth of the plantations are in their hands.

Lands in Guatemala may be readily acquired by foreigners, at prices that vary according to their situation, quality, etc.

Level lands covered with natural pasture are sold at \$2 per hectare ($2\frac{1}{2}$ acres). If level and covered with brush they bring \$1.50 per hectare, if they yield sarsaparilla and other valuable natural products, and \$1 if without such products. Broken, stony, miry and sterile lands are sold at 80 cents per hectare. Vacant public lands sixty miles or more distant from the nearest center of population may be obtained at one-fourth the above prices. Settlers introduced into Guatemala, or through the government Bureau of Immigration, may obtain concessions, of public land without payment and will receive a title to the same on fulfilment of certain easy conditions. Settlers are also exempt, for ten years, from any direct tax or impost,

and are also free from military service, and are entitled to introduce, free of duty, such tools, implements and machinery as are needed for their work. After becoming firmly established they may allow the foreigner to pay taxes on their importations, as in other countries.

HONDURAS.

The soil, surface and climatic conditions of Honduras are so similar to those of Guatemala that the cultivation of coffee is almost identical in all respects, and the yield and profits are about the same. As in Guatemala, scarcity of labor is the chief obstacle to coffee-raising, and the government, recognizing the importance of immigration for the development of the public lands, offers them to settlers at very low prices. Senor Jeronimo Zelaya, delegate from Honduras in the International American Conference, informed the Bureau of American Republics that lands on the northern coast may be obtained gratis, on application to the government.

The prices of land, when sold by the government, vary from 25 cents per acre, when suitable for pasture only, to 50 cents, when fit for agricultural purposes. Lands situated within a league of a navigable body of water are sold at 75 cents per acre, and those exceptionally located, or possessing particular advantages, bring \$1 per acre.

United States Consul Herring, speaking of the various products of Honduras, says its "coffee is perhaps without a superior in the world," and while it is true that the cultivation of the plant has not been extended so rapidly as in some other of the Central American States, it seems that the field offered for enterprises in that direction is not less inviting than in the neighboring countries.

NICARAGUA.

Coffee is the staple product of Nicaragua and the annual yield has continued comparatively steady during the last ten years. In 1881-82 the production was 120,262 quintals, and in 1890-91 113,000 quintals; showing a slight falling off. There are under cultivation in coffee about 76,000 acres, and each acre is estimated to produce five quintals. (A quintal equals 220.46 pounds.)

The lands in this Republic suitable for coffee raising are found on the Sierra de Managua, the greater part of which is adapted to that purpose; in Diriamba, San Marcos and Jinotepe, and about the base of the volcano Monbacho, near Granada. Good coffee lands are also found on the Island of Ometepe, in Lake Nicaragua, and around Boaco, in the Department of Chontales, where the cultivation has only recently begun. There are also many flourishing plantations near Matagalpa and Jinotega, and in the vicinity of Esteli and Lomato, in the Department of Nueva Segovia.

Water is scarce on the Pacific Coast lands, but in the Departments of Chontales and Matagalpa, is abundant. Communication between the districts and centers of population is, for the greater part, by roads where only mules can travel, though some of them will admit of transportation by wagons and carts. The altitude of the coffee lands is from 3000 to 4000 feet above sea level, at which height the atmosphere is pure and residents enjoy excellent health.

Labor is more abundant in the northern than in the Pacific departments, and wages of laborers vary from 40 to 50 cents per day. In the northern departments, too, are many streams that can be utilized to afford motive power for machinery; also, rivers of considerable size.

For the exportation of coffee, the principal roads are the National Railway from Granada to Corinto; the route by steamer from Granada to San Jorge, on Lake Nicaragua, and thence by wagons to San Juan del Sur; and that from Granada to San Juan del Norte, on the Atlantic. Freight on coffee from Granada to Corinto is about 60 cents per 100 pounds.

In order to encourage the establishment of coffee plantations the government of Nicaragua does not place a penalty upon industry in the form of a license tax, but has made a law, by which, to every person planting not less than 5000 coffee trees, a premium of 5 cents per tree is given; one-half of which is payable when the trees are 2 years old, and the remainder when they begin to produce. From 400 to 500 trees are set to the acre, and the cost of the plants is about \$5 per 1000. The expense of clearing the land for plantations is placed by the United States consul at Managua at from \$3 to \$12.50 per acre. The same authority estimates the cost of producing 100 pounds of coffee at \$5, which leaves a handsome margin for profit.

The price of government lands suitable for agricultural purposes is about 75 cents per acre; for such as are well watered with running streams, \$1; and for those containing valuable building timber and dye-woods, 20 cents per acre additional.

The consul above cited advises no one to go to Nicaragua to establish himself as a coffee planter with less than \$3000 or \$4000 capital.

The methods of opening new lands for plantations, raising the young plants, setting them in the plantations, the gathering and handling of the product are the same as those employed in the countries already treated of.

Consul Newell, at Managua, in his report dated June 13, 1891, estimated that the total area in cultivation of coffee in Nicaragua amounts to about 28,000 acres. He further states that the amount of public lands pre-empted December 31, 1890, was about 48,000 acres, of which 32,000 were fit for coffee cultivation.

The greater part of the coffee exported goes to Europe. This is owing, in part, to the fact that rates of freight to the United States are higher, and in part to the better facilities offered by European houses to shippers of coffee.

According to the same report, there were at that date in the department of Matagalpa, 2,000,000 trees, which, in the beginning of 1893, would begin to produce. His estimate that these trees should produce 10,000,000 pounds of coffee is clearly too high, since such a yield would require an annual product of five pounds per tree; whereas, the yield per tree, as estimated in another part of the same report, is about one pound.

The departments of Masaya, Managua and Matagalpa, appear to contain the greater of the lands adapted to coffee culture. Out of 17,000 acres of land pre-empted, only 120 acres were not suited for coffee plantations; and out of 13,000 acres in Managua, over 8000 were fit for coffee.

COSTA RICA.

The coffee plant was introduced into Costa Rica in 1796, and its cultivation there has been continuous since that time, the production gradually and constantly increasing under the Spanish occupation and

since the independence of the country, reaching 5000 tons in 1861 and 18,000 in 1884. The exports of coffee in 1891 amounted to nearly \$6,140,000. Costa Rica coffee is of a superior quality and commands the highest price in the market. It is largely used in England.

The census of 1890 showed the existence of 8130 coffee plantations, with 26,558,251 trees. These plantations were situated at various altitudes, from 2500 to 5000 feet above sea level, but the best results are obtained at 4000 feet.

The method of raising the young plants in nurseries, the distance at which they are planted, the preparation of the virgin lands for the plantations, and the subsequent cultivation of the trees, are the same as in the other coffee districts of the Western Continent.

The seed beds are sown in May, and in the same month of the following year are set in the plantations. At the end of two years a few berries will be produced, the first regular crop being harvested the following season. The cultivation of other crops between the rows while the trees are young is practiced to some extent, as elsewhere; the banana, or a quick-growing tree called "poro blanco," being used to shade the young plants. The average annual cost per acre of working a coffee plantation after it comes into bearing is estimated at about \$6, and the annual yield is put at an average of 2500 pounds per acre; but 2000 pounds is a safer estimate.

The quincunx order of planting the trees in the plantations of Costa Rica is not so common as in the other coffee producing countries, notwithstanding its obvious and considerable advantages.

The gathering, which goes on from December to March, is done largely by women and children, who pick the berries in baskets holding from eighteen to twenty quarts. The gatherers are paid about 12 cents per basket, and active workers can fill eight to ten baskets per day.

The provinces of San José, Alajuela, Cartago and Heredia and those in which the cultivation of coffee is most extensively pursued, and in all these, except Cartago, the greater part of the available lands are already occupied by plantations. A vast extent of excellent coffee lands is found on the Atlantic side of the country between Cartago and Reventazon, and are said to be even better than those of Heredia and San José.

The Costa Rican Government encourages the settlement of foreigners in the country to engage in agricultural pursuits, and offers lands at very low prices, considering the great productiveness of their soil.

Public lands may be acquired by pre-emption, in tracts of not less than 120 acres, by merely fencing them and giving notice to the authorities of the intention of the occupant to put them under cultivation; and if the cultivation be carried on for two years, a patent of ownership will be issued to the holder, and he may inclose and claim in the same manner another 120 acres, and so on.

Lands may also be purchased, in areas not to exceed 600 hectares for each person, at public auction, at prices varying from 80 cents to \$2 per acre, according to locality, quality, irrigation and nature of growth on them. If the lands at these prices are situated more than fifteen miles from a town of 3000 inhabitants, or from a railroad, these prices will be reduced one-half; if from thirty to sixty miles, they will be sold at one-fourth, and if more than sixty miles, at one-eighth the prices named. These lands may be paid for in cash or in ten annual instalments, at 6 per cent interest. If at any time the purchaser shows that the improvements he has made are worth double the interest due, he is excused from payment of such interest; and if the improvements be worth twice as much as the price to be paid, by the terms of the sale, he is exempted from payment of all interest due.

SALVADOR.

Coffee is the principal production of this country and amounts annually, according to official publication, to about 60,000,000 pounds. The lands most productive of this staple are situated in the departments of Santa Ana, La Libertad, San Salvador, San Vicente, La Paz and San Miguel. The great profits realized in coffee raising in these departments have stimulated the opening of new plantations on a large scale.

As in the other Central American States, an altitude of about 3000 feet above sea level is preferred. The methods of preparing the soil, planting the trees, cultivating the plantation, gathering the crop, and preparing it for market, are the same as are followed in the neighboring states.

Want of railroad transportation and of properly constructed roads, together with the difficulty of securing sufficient laborers, is here, as in the other coffee producing States of America, the chief obstacle to enterprises in coffee raising. There is only one railroad in the country, and its length is only a little over forty miles. Others are projected, but it must be many years before the coffee producing districts can substitute transportation by rail for mule trains.

COLOMBIA.

The exports of coffee from Colombia in 1889 amounted to 3,516,293 pesos, equivalent to about \$2,155,500 in United States currency, and in 1890, the exports rose to \$2,613,000, showing a considerable increase in the production, and being larger by more than \$1,000,000 than the gold exports, which come next in value.

The profits of coffee raising in Colombia are no doubt considerable and almost certain, when the proper locality is selected and the necessary capital and intelligent management are employed in the establishment of the plantations and their subsequent care and cultivation. The cost of the land for setting out and growing 100,000 coffee plants, and of implements and cultivation needed, is thus estimated by an intelligent American, who examined various localities and studied the question of coffee cultivation on the spot :

First year.....	\$5,567
Second year.....	5,414
Third year.....	1,754
Fourth year.....	3,000
Machinery for cleaning the berries.....	2,000
Total.....	\$17,735

The same gentleman gives the yield of the coffee tree from the third year forward as from two and one-half to four pounds per tree each year. This estimate is probably too high, but even at one pound per tree the product of 100,000 trees would be worth \$20,000 for the fourth year, at 20 cents per pound

The cost of transportation from Bogotá to New York is estimated at 2.9 cents per pound, and the *Estadística Mercantil* puts the cost of

production at $4\frac{1}{2}$ cents per pound. The profit is thus seen to be very substantial.

The price of labor is low, the wages of a day laborer being about 25 cents, and in some districts children are employed in gathering coffee at the low wages of 5 cents per day, according to the statement of the gentleman before alluded to.

The coffee plantations of Colombia are said to be remarkably free from disease, and the equatorial situation of the country renders it easy to find localities where the temperature is just suited to the growth of the coffee tree, and but slightly variable. It is simply a question of altitude, and the mountainous character of the surface facilitates the selection of the proper height at which to establish plantations.

Irrigation is said to be rarely necessary in Colombia, and almost the only drawback to the rapid extension of coffee planting appears to be the scarcity of labor, the adequate supply of which is the only great unsolved problem that confronts all proposed enterprises in Central and South America.

Many plantations produce in the third year almost enough to pay for the expense of the cultivation up to that time.

The plants are set about nine feet apart, so that an acre will contain about 460 trees. The manner of cultivation, pruning, gathering and cleaning, is almost the same as prevails in the coffee-producing countries already treated of, and needs not to be repeated here.

The districts in which coffee is profitably produced lie at altitudes varying from 1500 to 5000 feet above sea level; but the tree thrives and produces best at the mean of these two extremes. Considerable quantities of coffee are gathered by the Indians from trees that grow wild on the mountain slopes; and this coffee is the same as that produced in the cultivated plantations, except that the size of the berries is generally smaller.

The consul-general of the United States at Panama states, in a report to his Government, dated April 8, 1891, that there is no limit to the amount of land that may be acquired by settlement and cultivation in the Department of Panamá. Every person occupying uncultivated public lands for agricultural purposes acquires the right of property in the land he cultivates, whatever its extent; and if such

occupation be made by the establishment of coffee plantations, the settler has the right to claim an extent of land adjoining equal to that already occupied.

Sr. Climaco Calderon, the consul-general of Colombia in New York, referring to Colombia in general, says: "The government of Colombia does not offer special inducements to immigration. Bona fide immigrants are allowed in Colombia twenty-five hectares (about sixty acres) of public land and the importation, duty free, of all the implements and tools of their trade and profession."

VENEZUELA.

Venezuela ranks next to Brazil, and, therefore, second among the coffee producing countries of America. The exports of that product in 1890 amounted to 71,167,850 bolivars, or \$13,685,577 in United States currency. The importance of coffee culture in the country is seen when it is known that this amount was about three times the value of all the other exports combined.

That large districts in Venezuela are admirably suited for the growth of coffee is thus placed beyond a doubt, and the production already reached promises to make this Republic some day a rival of the great country on her southern border.

The first coffee planted in Venezuela was near Caracas, in 1784, and the seed from these first plants, distributed through the country, formed the beginnings of the future plantations. It is estimated that the lands already occupied by these plantations amount to 346,000 acres, containing about 168,000,000 trees.

A large portion of the mountainous part of the country, in the northern part, is well suited to coffee raising, and can be brought under cultivation with no greater expense than lands in the other countries that produce the plant.

The coffee of Venezuela is undoubtedly of as good quality as that of the neighboring countries. It may be remarked that here, as well as elsewhere, it is the same plant, the same species, the same variety, that produces nine-tenths of the American coffee, and that, as in the hotter countries, a higher altitude is necessary than in the cooler; or, in other words, about the same temperature is necessary for its profitable production, and about the same qualities of soil, the

quality of the coffee produced depends more on the seasons, the cultivation, and handling than on any special adaptability possessed by any country within the coffee zone.

About the same altitude is necessary for successful results as in Colombia, and the same mode of establishing the plantations prevails, except that the trees are planted rather closer together than in Brazil and Central America. A gentleman who has resided many years in Venezuela estimates that about 676 trees are contained on an acre, and that the average product per tree is one pound. He states the cost of handling and preparing for market at about \$5.40 per bag of 110 pounds, and the selling price at \$17 to \$21—giving a profit of over \$13 per bag. This would give a profit of about \$75 per acre for the plantation. The adoption of the modern improved machinery for the cleaning and drying of the berries, by lessening the cost of handling, and the amount of inferior coffee, will doubtless increase the profits of coffee raising in Venezuela, as it has done in other countries.

Under a decree signed on the 7th day of January, 1893, several provisions were made by the government of Venezuela for the encouragement of immigration. Under this decree immigrants are divided as follows:

First. Immigrants without contract, coming in search of some occupation in this country.

Second. Immigrants coming under contract between themselves and the government of some one of the States.

Third. Immigrants coming under contracts between themselves and private individuals or companies.

Fourth. Immigrants under contract to work in colonies belonging to private persons on vacant public lands.

Fifth. Immigrants under contract to work in colonies belonging to private persons on their own private lands.

Sixth. Immigrants under contract to work under the direct management of the government.

A board of immigration was created to carry out the decree. The board is known by the name, "Central Board of Immigration," and may establish subordinate boards throughout the Republic.

For the purpose of promoting immigration, the government

grants all immigrants voluntarily coming to the country the following assistance :

First. The payment of their passage, both by sea and land, from the place of embarkation to any of the main immigrant depots. The national government may also pay the passage of the immigrants from the place of residence to place of embarkation.

Second. Payment of landing expenses and board and lodging of the immigrants for thirty days after arrival.

Third. Admission, free of duty, of their wearing apparel, domestic utensils and instruments of their calling.

Fourth. Exemption from the payment of any fees for passports given them.

Special provisions are made for the care of the immigrants, who are guaranteed all the rights accorded by law to aliens, and if they choose to be naturalized, they shall be exempt from military service during the whole of their lives, except only in case of foreign war.

Special provisions are made in behalf of individuals and companies organizing colonies for settlement in Venezuela.

The manner of making contracts with immigrants is carefully guarded in this decree.

Such immigrants as may purchase public lands during the first two years of their residence in the Republic shall not be bound to pay the price thereof until after the expiration of four years, counted from the day on which they enter into actual possession of the purchased land ; but they will not be allowed to sell or transfer said land during this period.

The patent, or title of ownership, shall not be delivered to the immigrant until after he has paid the stipulated price and given sufficient proof both of his residence on the tract of land referred to, and of his having put the same under cultivation.

The prices to be charged under the decree for national lands are as follows : For agricultural lands, \$3.12 per acre, and \$386 per square league for pasture lands, or lands suitable for raising cattle.

Special provisions are made for the colonization of public lands by private individuals and companies.

In general, it may be said that the provisions of this land law are especially favorable to immigrants and parties seeking investments in any industry that may be profitably carried on in the Republic.

BRAZIL.

In 1891 the exports of coffee from Rio de Janeiro alone were 425, 055,000, valued at \$42,500,000 at 10 cents per pound. The exports from Santos are usually about one-half of those from Rio, and from these two ports the bulk of the coffee sent abroad is exported. The magnitude of the coffee growing interests in Brazil, and its importance in maintaining the national wealth and credit, may be estimated when it is considered that the United States alone paid to Brazil for her coffee in 1891 more than \$45,000,000.

The profitable cultivation of coffee in Brazil is confined to the four states of Espiritu Santo, Minas-Geraes, Rio de Janeiro and São Paulo. It is produced as far north as Pará and in considerable quantities in Ceará, but the yield is less and the quality inferior to that of the product of the famous zone comprised in the four states just mentioned. The growth of coffee culture has been natural and remarkably rapid. No favors from the government, such as have been given to sugar production, no inducements to immigration on the part of national or state governments have contributed to the remarkable development of this great agricultural interest; but the natural adaptation of the soil and the growing demand for this staple have been sufficient to increase its exportation from thirteen bags in 1800 to the enormous quantities that annually load the vessels of all nations in the ports of Rio and Santos. The facilities for transportation from the interior to the coast have been a great factor in this increase, no doubt, as well as the moderate rates of freight on the railroads that have their termini in these ports.

The plantations are generally made on hillsides, from which the heavy forest growth has been cleared by felling the trees and burning off the undergrowth. The valuable logs are sometimes sawed on the spot into boards and planks; sometimes burned, after drying, and sometimes allowed to lie on the ground and decay. The latter method is perhaps the best, as the logs contain the wealth of the soil accumulated during years, which is thus returned to it again. As the cultivation is done altogether with hoe, spade and mattock, these decaying trunks are not so much in the way as might be supposed. All the vegetable growth that can be kept on the ground and does not interfere with the growing coffee trees aids in preventing the

washing away of the mold from the soil, which a bare cultivation would carry off in a few years.

A plantation, properly managed, lasts for about thirty years in profitable bearing, and by that time the soil is worn out, as is attested by the many bald, red hills to be found in the older cultivated districts of the coffee zone.

The young plants are sometimes raised in seed beds, as described in speaking of coffee culture in Mexico: sometimes young shoots from the roots of old trees are employed, and sometimes the more expensive, but better, method is resorted to of raising each plant in a separate earthen pot, whence, at one year old, it is transplanted with all the earth about its roots to its permanent location. Long rows of these pots with their plants, set on a slope, over which water is constantly running, and protected from the hot rays of the sun by matting stretched on poles above them, may be seen on the plantations where the best methods are employed. The system is costly, but about a year is gained in the growth of the trees, and the plants, receiving no check by transplanting, rarely need replacing. It has been found advantageous also to select the very best grains for seed, and some planters have succeeded in establishing improved and distinct varieties, by repeated reproduction from the same kinds of seed.

Nowhere in the world is greater attention given to the cultivation and handling of coffee than in Brazil, and nowhere else is improved machinery for the preparation of the crop for market so generally employed. It is the fashion in praising the coffee of other countries to describe it as superior to the Brazilian, but no permanent advantage is gained by unjust comparisons, for they are against the facts. The truth is that no coffee anywhere in the world is superior to the Brazilian, which is sold everywhere as Java, Mocha, Maracaibo, etc., at the fancy of the dealer and whim of the consumer. Every plantation in the country produces the Java and Mocha of the markets of the United States, and it is only an affair of sieves of differently sized meshes to classify the products of Brazilian plantations into the falsely named kinds, in order to demand a higher price from the buyer. These facts can not be controverted any more than can the other truth that no country produces coffee superior to that of Brazil. The coffee with a small, round grain, called, generally, "pea-berry," and sold in the United States as "Mocha," is produced

by topping and severely pruning the ordinary plant, although many such grains will always be found on trees treated in the usual manner.

While the young trees are growing, crops of corn or mandioca are sometimes raised between the rows, which are planted in the quincunx order, and these crops are sometimes sufficient to repay the expenses of the plantation. At the age of four years the trees are about six feet high and in profitable bearing, The principal gathering month is November, and then every available hand is engaged in picking the berries in baskets. The average result of a day's gathering for each person is enough to produce about fifty pounds of dried coffee. The baskets are emptied of their contents into carts which convey the berries to the mill-house, where they are to be prepared for market.

The berry resembles very closely the cranberry, and contains two grains with their flattened sides toward each other. Each of the two is covered with a closely adhering membrane called *pergaminho*, and outside of this is a thicker and more loosely fitting coat called *casquinho*. The two grains with their coverings are contained in a tough shell called *casco*, and this is surrounded by a white pulp and outer skin, thus forming the berry.

To prepare the coffee for market, all these coverings must be removed. The outer pulp is removed, after maceration in water, by a machine called *despolpador*, which consists of a revolving iron cylinder set with teeth and covered on one side by a concave sheet of metal.

A trough lined with cement is placed on a hillside above the mill, and through it a stream of water is kept running. Into this the coffee berries are thrown and are carried down by the stream into a large vat. In this vat the heavier berries sink to the bottom, whence they are drawn off through a pipe to the *despolpador*. This machine removes the pulp, the berries passing with the water to another vat beyond. In this the water is kept in constant motion by a revolving wheel, and the pulp is thus thoroughly washed off and carried away with the water, while the coffee grains sink to the bottom; and thence passing to a strainer the water is all drained off, leaving them ready for the process of drying.

Two methods of drying are in use; the old process, which consists in spreading the grains on a cement-covered pavement called *terreiro*, where they are allowed to dry in the sun. For this about two months are necessary, and the grains have to be raked over and

turned during the day and gathered into piles and covered at night. Whenever a shower comes up the coffee must also be covered. The more modern and satisfactory process of drying by steam is employed on many of the larger plantations. By this process the drying, which by the old method requires about sixty days, is accomplished in a few hours, with a vast economy of labor. Under this system drying is done in large, shallow pans of zinc heated by steam coils beneath. This process will, doubtless, on large plantations, supersede the older and more expensive method. The drying is done more uniformly and with no danger of injury from sudden rain.

The coffee, after drying, is still inclosed in the inner and outer skins, which have been rendered more brittle by the drying. The machinery necessary for the removal of this is somewhat complicated and expensive. The most efficient of the machines in use are from the United States, and a complete plant for a large plantation will cost not less than \$25,000. The coffee is brought from the drying house and placed in bins, whence, by an elevator band, it is carried to a ventilator, where it is rid of rubbish and dust by sifting and fanning. From the ventilator the coffee is carried to the sheller (*descascador*), which consists of a toothed cylinder, by whose rapid revolutions the outer and inner husks are broken. The grains and broken husks are carried by a pipe to a second ventilator, where the latter are sifted out and fanned away, and the former are carried by an elevator to the separator. This is composed of hollow copper cylinders, pierced with holes of different shapes and sizes. These cylinders are kept constantly revolving, and the coffee grains, passing through the holes, fall into separate bins, being thus assorted according to their size and shape.

The coffee thus mechanically classified goes into the markets of the world, where it is sold, the small, round grains as Mocha, the large flat grains as Java, and so on, until all the coffee-producing countries are represented in all the corner groceries of the world by the product of a single Brazilian plantation.

A small portion of the *pergaminho* which still remains is removed by the *brunidor* (polisher) by trituration and fanning. Finally, after passing through all this series of machines the coffee is carefully picked over by hand and is ready to be put into bags.

Although immense tracts of land suitable for coffee culture yet remain unoccupied, nearly all of them are held by large land owners

who generally refuse to sell. As there is no tax on land and a considerable one on land sales, the owners prefer to hold them, as the constant demand for coffee lands annually enhances their value, and they can be held with no expense to their owners. Good coffee lands when sold bring large prices, and no person can engage in coffee raising without considerable capital. As has been said the coffee zone embraces the states of Espírito Santo, Rio de Janeiro, Minas-Geraes and São Paulo, and the greater part of the unoccupied public lands are situated in the other states.

Under the new constitution of Brazil all wild lands formerly belonging to the Empire are declared to be the property of the states within whose limits they lie, and their sale is governed by the various regulations established by the respective legislatures.

ECUADOR.

Coffee is the third in value of the exports of Ecuador, though its production has not reached the importance attained in most of the other coffee-producing States of America. But little information concerning its cultivation has been accessible to this Bureau, but it may be said that the methods of planting, cultivating and gathering are the same as in the neighboring countries.

There are, undoubtedly, large bodies of lands in the Republic suitable for coffee culture, and the Secretary of the Treasury, in a report submitted to the Congress of Ecuador, states that the government possesses vast tracts of great fertility that are valueless for want of occupants. These lands lie on the eastern and the western slopes of the Andes and their difficulty of access is the chief obstacle to their settlement. The price of public lands sold by the government is from 20 to 80 cents per acre, and not more than 500 acres will be sold at one time to one individual.

BOLIVIA.

Bolivia must be reckoned among the coffee-producing countries of America, and although the exportation of that product has not reached the proportions attained in some of the neighboring countries, the quality is of undeniable excellence. Mention may be made of the famous coffee of Yungas which rivals the Mocha in excellence.

The coffee-producing lands are situated in the province of Puna-

taand in the departments of Santa Cruz, Veni and La Paz. The mountainous character of the country, while favorable in many respects to the selection of sites for coffee plantations, renders transportation so difficult that it constitutes the chief obstacle to the opening of lands, and the day is probably distant when the steam car shall take the place of the slow mule train. The same methods of opening and cultivating coffee plantations prevail here as in the other coffee-raising countries and their production is about the same; but no statistics are available to show the price of labor and other expenses of handling and marketing.

THE GUIANAS AND WEST INDIES.

The Guianas and most of the larger West India Islands produce greater or less quantities of coffee. In the year 1890-91 the island of Jamaica exported coffee to the amount of \$1,381,114, and Puerto Rico to the value of 4,858,306 pesos; in 1888 Guadalupe exported 905,368 francs' worth. Coffee culture was formerly an important interest in Martinique. It is probable that no great increase in the coffee product of the West Indies is to be looked for for many years, and the markets of the world must continue to obtain their supplies from the continental countries treated of in the foregoing pages.

JAMAICA

Exports annually from 800,000 to 900,000 pounds of coffee. The value of the exports of this article in 1891 was about one-sixth of the total export. More than half the coffee exported is taken by the United States, but consists chiefly of the lower grades, the better and higher-priced qualities going to England. The best coffee of the island is raised in the eastern part of the parishes of St. Andrew and St. Thomas, and goes almost entirely to England. The coffee of Jamaica, like that of Haiti, is of fair quality, a little stronger than Java and milder than Rio. The greater part of the product is raised by negroes, who own from one-half an acre to five acres of ground, where the trees are planted without order or system and receive little attention.

The number of plantations where as much as fifty acres are cultivated in coffee is only thirty. In the preparation of the coffee

for market, the most primitive means are employed, the cost of machinery for that purpose being beyond the means of the small growers. The berries, after picking, are dried on the ground, and the outer skins are removed by beating in large wooden mortars. On the larger plantations more care is given to the preparation of the ground, and the plants are set at regular distances, generally six feet apart. Being planted so near together, it is necessary to top the trees when they reach the height of about four feet, and by annual pruning to keep them from crowding each other. The plantations are weeded with a hoe at least four times every year, as without this weeding the ground would soon be overgrown with grass and plants that spring up with marvelous rapidity in that tropical climate.

Jamaica appears not to offer any inducements to settlers proposing to embark in coffee culture. Lands suitable for the growing of coffee on a large scale are difficult to obtain, and suitable labor still more so.

HAWAIIAN ISLANDS.

Coffee has been raised in Hawaii and the other islands of the group for many years, although the production has varied greatly and has never been sufficient to supply home consumption. It appears from the records of the custom-house that in 1870 the exportation amounted to 415,111 pounds, and in 1885 fell to 1675 pounds. For nine months of 1892 the exportation was 13,098 pounds. The total exportation since 1881 has been 215,782 against an importation of 877,409 pounds.

New enterprises are on foot for the planting of lands in coffee. In the Hamakua and North Hilo districts, about 170 acres are already planted. In the district of Puna about 100 acres are growing, and it is estimated that about 1300 acres are planted in coffee on the island of Hawaii. These are mostly new plantations, the greater part of which will soon come into bearing.

The first plantations made in the island were only a few feet above sea level, and to this fact may, perhaps, be attributed the blight which almost destroyed their production about 1860, since the plantations more recently established at an elevation of 1000 and upwards have been almost entirely free from blight. The high rate of wages, the cost of transportation and the difficulty of buying or leasing suitable land for a long term are the greatest obstacles to the development of the coffee-producing capacity of the islands.

I.

COAL AND PETROLEUM IN COLOMBIA.

REPORT TO THE BUREAU OF THE AMERICAN REPUBLICS.

BY C. F. Z. CARACRISTI, C. E.

Mr. C. F. Z. Caracristi, C. E., has prepared for the Bureau of the American Republics, the following report on the coal beds and petroleum deposits of Colombia, South America:

I have the honor to respectfully transmit my report on the coal beds and petroleum deposits of the Republic of Colombia, South America. In doing so, I associate myself with a pleasant labor and duty; and while serving Colombia, I hope to also serve the interests of the United States.

The extensive surveys which I have just completed form the basis of this report. These surveys cover the territory embraced in the departments of Panama, Cauca, Bolivar and Magdalena. I shall give only passing notice, however, to the coal measures of the interior and speak with special reference to those that have an international bearing as the source of full supply for the merchant marines and navies of the three Americas.

LAWS GOVERNING THE COAL DEPOSITS OF COLOMBIA.

The coal deposits of Colombia are subject to and governed by articles 1116 and 1118 of the Colombian Fiscal Code, embracing the laws of 1868 and their amendments and constructions by the Supreme Court.

Under these laws, it is held that all coal deposits that border on the Atlantic or Pacific oceans, or any tributaries thereof or within fifty kilometers of any navigable rivers belong to and are the property of the National Government of Colombia. These laws vest the "Executive Power" of the nation with the right to dispose of the coal

deposits to any individual or corporation ; provided not less than 10 per cent of the total net profit of the mine or mines conceded shall be delivered by the lessee to the National Treasury of Colombia and the lease or concession shall be ratified by Congress.

The same laws, it is claimed, apply to the petroleum oil springs or "seeps;" but a thorough research of the laws does not divulge anything to sustain this position, except the use of the word "carbon" in the law of 1868, which high legal authorities in Colombia claim to embrace petroleum as well as coal.

It is also held by the Supreme Court of Colombia that lands conceded to freeholders by the Spanish crown or by the government, previous to the passage of the act of 1868, are not amenable to the above laws and are the free estate of the holder, exempt from any restriction as to the ownership of the "mineral right."

COAL AND LIGNITE OF THE DEPARTMENT OF PANAMA.

In the early days of the Panama railroad, and later, during the canal construction period, numerous efforts were made to explore the coal regions of the Atlantic in near proximity to the ports of Colon and Panama. These researches led up to the discovery of bituminous shales and lignite near the port of Boca del Toro on the Caribbean Sea. Some hopes had been entertained that these deposits would give valuable coal, but an examination and analysis have convinced me that the veins are too small and the percentage of carbon too low to justify any expectation from this source. The largest vein I saw was about three feet thick and the analysis gave :

Carbon	40.131
Water.....	12.962
Ash	30.216

It will be seen at a glance that the coal has no commercial value, especially as some of the carbon was infusible and noncombustible "graphite." Considerable work was done at these mines some years ago, but little signs of the excavations now remain, the opening being filled with debris washed in by the waters of the rainy season.

These deposits do not cover an area of over ten miles, and are not worthy of more than passing mention.

On the Pacific, coal measures expose themselves near Punta

Burica, in Colombia, and the peninsula projection that forms the northern inclosure of Golfo Dulce, in Costa Rica. The numerous small streams that flow into the gulf from the Cordillera, on the boundary of Colombia and Costa Rica, bring down fragments of lignite and coal, showing that they pass through large carboniferous deposits.

Some work was attempted in these regions (judging from openings that are now nearly filled in with debris) many years ago, but evidently with meagre results, owing to the fact that the exploring party did not enter sufficiently far into the interior to reach a healthy carboniferous formation. I consider it feasible to mine good coal in these regions at a distance of from fifteen to twenty miles from the coast, as the croppings I examined at several points show veins of from three to six feet thick of bituminous coal embedded in lignite and shale.

The carboniferous measures of this locality cover an area of about 100 square miles, and are about equal to the coal beds of Chesterfield county, Virginia.

This disposes, so far as I have investigated, of the coal beds of Panama, with the exception of those of Rio Chucunaque, about twelve miles northwest of Point Mosquito. It was quite impossible for me to examine these reported deposits, owing mainly to the difficulty of crossing the mountain, over which no pass could be found, to say nothing of the hostility I encountered from the Indians of San Blas, which made my stay on the coast rather risky at night.

COAL AND PETROLEUM OF THE DEPARTMENTS OF CAUCA AND BOLIVAR.

Looking at the map of Colombia, we see a great indenture on the Atlantic Coast of the Department of Cauca, formed by the Golfo de Uraba, or Darian del Nord. Into this gulf flow the Atrato, Arboletes, Punta de Pietra, and many other small streams. I consider the territory embraced within latitude $7^{\circ} 30'$ and 9° north, and longitude 2° and $3^{\circ} 15'$, meridian of Bogota, as containing the most promising coal deposits of the Atlantic Coast of South America. The coal measures expose themselves from Cabo Tiburon, on the borders of the Department of Panama, and follow around the gulf and shore, traversing the various rivers, and entering into the Department of

Bolivar after coursing the Arboletes. From here, the coal extends to the Rio Magdalena, following the geological base of the hills from the valley of the Atrato. On its way through the Department of Bolivar, the coal is exposed when it crosses the Rio Sinu and Cannaletta.

The coal which I explored on the Uraba Coast was, first, a large deposit which exposes itself about three miles from the mouth of the Rio Punta de Piedra. Here, the inundations have washed a small cañon through which the river flows, and on the banks of which may be found carboniferous outcroppings. Second, a large and well-defined extension of the deposit of Rio Punta de Piedra on the right bank of the Rio Volcan at its confluence with Rio Arboletes, four miles from its point of emptying into the Gulf. At this point, the veins of coal are from three to twenty feet thick, and extent southward a distance of not less than sixty miles. Third, I examined the coal of the Atrato, but owing to the rise of that river was unable to learn, with any degree of precision, the nature or geological condition of the deposit. Fourth, I discovered large veins of coal on the Rio Sinu, and excellent coal on Rio Cannaletta.

In Cauca, there are over twenty veins of coal, anthracite, bituminous and lignite, all of which has more or less commercial value. In their whole distance along the Darian in Cauca and the shores of Bolivar to a point opposite Puerto de Colombia, the coal measures have a length of 260 miles with an average width of thirty miles. This gives a square mileag  of 7,800, or a coal area equal to that of Alabama.

At a distance of about six miles from the Rio Caiman in a northwardly direction, the carboniferous strata show a "pinched" condition, and are somewhat distorted and irregular, doubtless from the effect of recent volcanic dislocations. The same may be said of the coal measures where they cross the Rio Varacuarando, above Turbo, to the south.

On the Rio Arboletes and Volcan, the "croppings" are even more wonderful than those of Pennsylvania, or, in fact, any I have had occasion to examine during my professional career of over thirteen years.

Following are the analyses of the coal of Uraba:

Sample from Arboletes.	Per cent.	Sample from Punta de Piedra.	Per cent.
Gravity 1.62		Gravity 1.81	
Fixed carbon.....	41.50	Fixed Carbon	77.52
Ash	6.11	Ash	7.31
Volatile matter	50.33	Volatile matter	12.41
Water.....	2.06	Sulphur .....	.26
		Water.....	2.50
Total	100.00	Total.....	100.00
Color of ash, white alkaline; quality of coal, black lignite.		Color of ash, yellow; quality of coal, anthracite; heating power.	
Coke	49.30		69.92

The coal follows the coast line at a distance of from three to forty miles. I would estimate the visible supply at not less than 18,459,200,000 tons in the Departments of Cauca and Bolivar alone.

The cost of mining the coal I place at about \$2.10 as against \$1.616 in Pennsylvania.

PETROLEUM OF THE DEPARTMENT OF CAUCA.

During my visit and explorations on the Gulf of Uraba and along its tributaries, I discovered at a very short distance from the coal, extensive strata of "oil rock," which led me to investigate the petroleum "oozes" or springs that peons reported as existing near the Rio Arboletes. This investigation led to the discovery of not less than forty petroleum "seeps" or springs, one of these having a crater about twelve inches in diameter, which gushes forth sufficient oil to fill a six inch pipe. A petroleum pond sixty feet in diameter and from three to ten feet deep is also found near this spring. The flow of these oil springs is something very wonderful, and deserves the attention of geologists, to say nothing of investors.

These wells, or rather springs, lie at a distance of from one to three miles from the shores of the gulf, to which point it would be very easy to construct a pipe line at a cost of about \$14,000.

The oil is remarkably pure, passing as it does through an extensive bed of coral which seems to act as a filter and refiner. A proper survey of the oil region of the Uraba would be interesting, both from

a scientific and an industrial standpoint. The proper development of the possibilities of the oil industry at this point would probably result in the control of the petroleum market of South America.

The most interesting feature of these petroleum deposits is the fact that one of the "seeps" seems to prove conclusively the error of both the chemist and geologist as to the origin of petroleum.

At a point about 10 miles from the Rio Iquana, in the mountain range of Gigantones, I found what at first appeared to be a geyser, but which subsequently proved to be an oil spring. The oil and water rose out of this crater at alternate intervals, and brought with it small lumps of burnt carbonate of lime and sulphur and fragments of ozocerite (mineral wax). The lime had been burnt to such an extent that all the carbonic acid gas had been driven off and both the sulphur and ozocerite exhibited a charred condition. The oil and water that rose out of the spring were heated when they arrived at the surface to 130 degrees. This petroleum, therefore, was doubtless produced by the combination of carbonic acid gases with sulphuric acid gases working on the ozocerite and mellitic basis of the surrounding earth and then combining with hydrogen. In this condition it came to the surface with the heated water of the spring, or perhaps the hot fumes were plunged into the water and became condensed, heating the water. The oil then formed on the surface of the water, being lighter, and was held in suspension until sufficient steam was accumulated in the water to eject it, which explains the reason why the oil rose to the surface alternately with and before the water.

These examinations being concluded, I turned my attention to the

COAL DEPOSITS OF THE SIERRA NEVADA DE SANTA MARTA, IN THE DEPARTMENT OF MAGDALENA.

I proceeded to Santa Marta and busied myself with the collection of such data and general information on the supposed coal deposits of the Sierra Nevada de Santa Marta as I could gather. Both General Francisco Duran and the Hon. J. Manuel de Mier, United States Vice Consul, rendered me valuable service, without which my labors would have been futile.

At a distance of two miles south of Santa Marta, at the base of the mountains, I found the first coal cropping in the form of a vein of

lignite, bearing with it cannel coal, which, upon development, I believe will be found to be a valuable deposit.

I then followed the geological line to the Rio Gaira where other showings exposed themselves; thence I proceeded to Cienaga, where the coal measures seemed to exhaust themselves and are interrupted by an extensive mountain, 800 feet high, of white, gray, blue, black and white, and red marble. The marble at this point is highly metamorphic, having a compact grain, is beautifully crystalline and is free of "sand blows" and susceptible of an excellent polish. It is equal, if not superior, to the marble of Italy and Africa, upon which I have had occasion to make various reports.

Crossing this marble projection, which shows off the carboniferous measures, I again found coal at a point north of Rio Frio, and these measures I carried to Rio Lavilla, Rio Tucarina, Rio Aracataca, the Petrale Cañon and to Rio Fundacion and the Val du Par.

At Rio Fundacion, about one and one-half miles above the abandoned village of that name, the coal measures assume a proper and healthy form and exhibit large veins of coal for a distance of six or eight miles up the river. The total distance from Santa Marta to Rio Fundacion is seventy miles, about sixty of which are on the coal measures. In the Val du Par, too, I discovered extensive beds of the best quality of cannel coal.

On the Petrale Cañon and on Rio Fundacion I entered into extensive excavations which proved the coal to exist in well defined veins, and the "hanging" and "foot" walls to be of a healthy sandstone, which necessitated but little "timbering" in the working of the coal. These mines are extremely valuable, owing to the fact that they exist at a healthy elevation above the sea, are supplied with cold water from the glacier of Santa Marta and are on navigable rivers and on the line of a railroad now under construction from the port of Santa Marta.

The analysis of the coal of this region speaks for itself.

Fixed carbon.....	34.85 per cent
Ash.....	7.35 " "
Volatile matter.....	57.80 " "
Total	100.00

Will not coke; gives white ash, and is peculiar in the fact that it ignites under a heat of 270°.

The carboniferous measures of this region extend along the coast to Venezuela to the Lago de Maracaibo, where an English company, headed by Sir Edward Barrington, of London, is now opening up the mines. I am perfectly convinced that the beds of the Santa Marta region are identical with those of Venezuela.

COAL OF THE DEPARTMENT OF CUNDINAMARCA.

Extensive coal beds extend from near La Mesa along the Altiplaine, past Bogotá to Choconta. This coal is mostly of a bituminous nature, but some anthracite is known to exist. The area covered by the coal measures is about 3,000 square miles.

PETROLEUM OF BOYACA.

In Boyacá, near Tunja and Moreno, are found some deposits of coal and petroleum. The petroleum, samples of which I have in my possession, seems to be very fine, but owing to the want of railroad facilities, is unavailable.

COAL CONSUMPTION OF COLOMBIA.

It would be very difficult to estimate the total possible coal consumption of Colombia. I offer the following as the only available basis of calculation.

Consumption of coal by foreign ships on their way from Colombia to their respective ports of entry :

Pacific Mail	3	steamers monthly.
Atlas Line.....	2	“ “
Harrison Line.....	1	“ “
Hamburg-American Line.....	2	“ “
Royal Mail.....	2	“ “
Campagnie Generale Transatlantique	2	“ “
Transatlantica Espanola	2	“ “
West Indies and Pacific.....	2	“ “
Italian Line.....	1	“ “

Total steamers per month 17

or 204 steamers per year, burning on their return trips 40,800 tons of coal. The heat unit represented by the eleven steamers plying between Barranquilla and Honda, Pueblo Viejo and Cartagena is about 1000 tons of coal per month. They now burn wood, and are

often delayed on the river by not having a supply ready or the wood having been washed away by high water. This represents 12,000 tons per year:

The Panama Railroad consumes.....	7200 tons per year
The Savanilla Railroad consumes.....	1500 tons per year
Cartagena Railroad	Not complete
Santa Marta Railroad.....	Not complete

The steamers touching on the Pacific side are six per month, representing a coal consumption of 18,000 tons per year.

This gives a ready market for 79,500 tons of coal per year, not taking into account the "tramp" steamers that visit Colombia or the naval squadrons that constantly pass along the Atlantic coast of Colombia.

If either of the interoceanic canals is built, the development of the coal beds of Colombia, occupying, as they do, the most central location on the American Continent, would be a great economic factor to the nations of South and Central America, and to the merchant marines and navies of the world.

I look upon the development of these coal beds as involving a reduction of 10 per cent in the cost of transportation between the United States and South American ports.

The harbors of Cartagena and Santa Marta are among the best on the South American continent, and afford ample capacity for naval coaling stations for the navies of the world, and also safe harbors for merchant vessels. Should the harbor of Santa Marta prove too small, it would be easy to utilize the Bay of Gaira, six miles south of Santa Marta. This bay is three miles wide by two miles long, having a depth of from ten to eighteen fathoms, is well protected from the north and has an abundance of fresh water supplied by the river Gaira.

II.

COMMERCIAL INFORMATION.

COFFEE TREE DISEASE IN COSTA RICA.*

A peculiar disease, which made its appearance last year in the coffee trees of Costa Rica, and which was thought to threaten in a serious manner the coffee crop of that country, and affect thereby disastrously what is for the Costa Rican people the principal source of their wealth, caused the Government of the Republic to make inquiries into the nature and origin of the evil, and the ways, if any, of remedying it. Mr. Ad. Tonduz, Chief of the Botanical Department of the National Physical and Geographical Institute of San José, was ordered to study the subject, and his report, which, on the whole, is reassuring, as it shows that the disease is circumscribed to certain localities, and that its spread can be checked, has been published officially. It bears the date of September 27, 1893, and can be read in full in Nos. 231, 232 and 235 of the *Gaceta*, corresponding respectively to the 5th, 6th and 10th of October of the same year.

According to Mr. Tonduz, the seat of the disease is in those portions of the coffee tree which are in immediate contact with the atmospheric air, but more especially the leaves. Mr. Tonduz thinks that the disorder is due to a fungous parasite, whose germ or seed being carried either by the wind, the rain, or any other vehicle, adheres to the surface of the leaves, or other exposed parts of the coffee tree, and finds there, at the expense of the health and life of the latter, a rich and ample field for its own development. But neither Mr. Tonduz, nor Professor Saenz, who wrote a pamphlet on the diseases of the coffee tree, published officially at San Salvador, in March, 1893, and from whom Mr. Tonduz quotes abundantly, can exactly determine whether the parasite is the *Hemileya vastatrix*, which did so

* For description of coffee culture in Central and South American countries and in the Hawaiian Islands, see monthly bulletin, "Coffee in America," published by the Bureau of the American Republics, October, 1893

much harm in Brazil, or any other less obnoxious organism. Mr. Tonduz thinks, however, that even in case it is the dreaded parasite above named, its propagation can be effectively checked, either by destroying, preferably by burning, the most affected trees and thus exhausting radically the sources of infection, or by resorting to such remedies as sulphur, lime, and other disinfectants, when circumstances permit their use.

The most efficient of these applications consists of a mixture of one part of sulphur, the best kind of flowers of sulphur, and two parts of caustic lime, the whole well powered and mixed, so as to permit it to be blown or scattered, either by bellows, or by hand, over the diseased parts of the tree.

Dr. Emilio Goldi made, in 1887, a very interesting report to the Brazilian Government, which the latter published officially, under the title of "*Relatorio sobre a molestia de cafeeiro na provincia do Rio de Janeiro*," and in this, the subject is treated exhaustively.

TARIFF DECISIONS IN VENEZUELA.

A summary of recent tariff decisions in Venezuela has been received. These decisions are :

1. By virtue of a decree, dated May 22, 1893, as long as no port has been established on the western coast of the Republic, better adapted than that of Puerto Cabello for the transshipment of goods, on the territory of Venezuela, proceeding from Europe or the United States of America on vessels which can not reach the ports of destination, such goods may, as heretofore, be transhipped at Curacao conformably to the regulations established by the executive decree of January 26, 1883. This decree shall therefore remain in full force, and, consequently, the decree of December 30, last, relative to such transshipments, has been repealed.

2. Ice imported from abroad, which, according to No. 16 of Article 23, of the law of the Code of Finance, is classed in Class 1 of the tariff, shall, when imported into the cities of Caracas, Puerto Cabello, Coro, Maracaibo and Ciudad Bolivar, and into all those where ice factories are established, be subject to the duty of Class 2 (duty 10 centimes of a *Bolivar*).

3. On and after July 27, 1893, new articles imported in regulated quantities through the custom houses of the Republic in travelers' baggage arriving from abroad, shall pay a *surtax of 20 per cent on the duties stipulated for such articles in the tariff*, in compensation for the duties which would have been levied thereon for the packages if they had been imported by merchants.

TOBACCO TAX IN COLOMBIA.

Under a law enacted on the 10th of December, 1892, and recently re-enacted and promulgated as law No. 85 of the year 1893, the Government of Colombia has assumed the exclusive right of selling tobacco, whether manufactured or unmanufactured, when the article is to be used, or consumed in the country.

It has announced at the same time, that it may, if deemed advisable, monopolize the importation and the manufacture of cigarettes. The cultivation of the plant remains free. The exportation of tobacco in any form is also free, and shall not be burdened with duties of any kind.

Duties will be levied on imported tobacco as follows :

A duty of \$8 per kilogram (about 2 1.5 pounds) on cigars and cigarettes.

A duty of \$6 per kilogram on tobacco prepared in any other form or for any use whatever.

A duty of \$5 per kilogram on *picadura* (fine cut.)

A duty of \$4 per kilogram on tobacco not manufactured.

The right of importing tobacco does not imply or involve the right of selling it for home consumption. The funds obtained through the operation of this law are to be applied exclusively to the redemption of the paper currency and the reorganization of the National Bank of Colombia.

GOLD MINING IN BRITISH GUIANA.

Increased attention is being given to the gold fields of British Guiana, which are claimed to be developing into one of the richest auriferous regions in the world. In 1884, but 250 ounces of gold were exported; in 1885, the export was 939 ounces; in 1892 it was 199,615 ounces; and the end of the current year, it is predicted, will show a great increase upon these figures. Within the past few months, operations on an extensive scale have been projected. Proposals for the construction of a railway to the mining region have been advertised for by the Colonial Government. In addition to its gold fields, British Guiana is said to possess diamonds in abundance, and prospecting parties from South Africa are reported to be on their way to investigate this branch of mining industry.

The first annual report of the present Commissioner of Mines, regarding the gold industry of British Guiana, says: "Taking the mining industry as a whole, I think there is a very hopeful outlook for the colony, and that before very long it will take its place as a gold and diamond producing country second only to South Africa."

TRADE OF DEMERARA--1893.

From the list of exports from Demerara for the first six months of 1893, it appears that in the export of sugar there is a slight falling off as compared with the output at the corresponding date last year. The exports reached 35,564 hogsheads, while on July 10, 1892, it stood at 36,616 hogsheads. The export of rum reached 8,920 puncheons, a decrease of 2,546 puncheons, as compared with the export at the same date last year. There is a falling off in the export of molasses, but timber shows an increase. There is a marked decrease in the export of charcoal, cocoanuts, balata, pilot-bread and crackers, but isinglass, gums, cacao and coffee are ahead of the exports of those articles in 1892. The output of gold has reached 62,171 ounces, to the value of \$1,106,938 as against 54,599 ounces, to the value of \$973,449 at the same period in 1892.

ARGENTINE PRODUCTS--1893.

An estimate of the value of Argentine products in 1893, and the surplus for exportation, is as follows:

	Product.	Exportation.
	<i>Gold.</i>	<i>Gold.</i>
Grain.....	\$54,810,000	\$24,400,000
Sundries.....	32,200,000	2,400,000
Total agricultural.....	87,000,000	26,800,000
Wool.....	35,000,000	34,000,000
Meat.....	21,600,000	9,000,000
Hides and skins.....	24,000,000	21,000,000
Tallow.....	4,800,000	4,000,000
Sundries.....	19,600,000	7,200,000
Total pastoral.....	105,000,000	75,200,000
Grand total.....	192,000,000	102,000,000

A Buenos Aires newspaper says :

Comparing our products with what they were ten years ago, we find that the agricultural crops have more than trebled, whereas the wool-clip is almost stationary. This shows that the great development of the country has been in tillage, which is scarcely a motive for congratulation, seeing that the crops are constantly exposed to drought and locusts. The change, however, is a decided gain to the railways, in the way of freight, our grain crops weighing 2,500,000 tons, whereas the total weight of wool is under 140,000 tons.

TRADE OF URUGUAY--1893.

The following figures relating to the trade of Uruguay for the half year ended June 30, 1893, have been received :

The imports for 1893 were \$9,970,000 against \$9,120,000 for the same period of 1892. The exports for 1893 were \$16,190,000 against \$15,830,000 for the same period of 1892. The surplus of exports over imports in 1893 was \$6,220,000 against \$6,710,000 in 1892. It will be seen that there is a shrinkage in the surplus of \$490,000, although an increase has taken place in the value of both exports and imports. The revenue shows the small decline of \$38,000.

FRUIT SHIPMENTS FROM BRITISH HONDURAS.

Certain fruit growers and merchants of British Honduras have decided to establish a mutual company for the purpose of purchasing or chartering a steamer or steamers to trade between the United States and Belize and other ports within the colony and neighboring republics and islands. This step, it is stated, is deemed necessary because of complaints of the steamship service between British Honduras and New Orleans. In the prospectus of the company it is stated that "there has been a large increase in the production of fruit in the colony during the last two years and more, and capitalists as well as small growers undoubtedly will extend their area under cultivation if satisfied that they will receive a fair return for their produce. "During the year 1892," it is added, "423,763 bunches of bananas, 1,176,450 plantains, and 1,146,150 cocoanuts were exported to New Orleans," besides other fruits and rubber, sugar, hides, etc. The capital of the company is \$150,000 in 3,000 shares of \$50 each.

MINING EXHIBITION IN CHILE.

The Chilean Congress has voted the sum of \$150,000 to defray the expenses of the Mining and Metallurgical Exhibition to be held in Santiago, in April, 1894. It is proposed that the exhibition shall cover a wide field and shall be as complete as possible. The different sections comprise motive power, electricity, mining and crushing machinery, metallurgical installations, chemical industries, statistics and plans, and mining and metallurgical products. The government offers to pay the cost of conveyance by sea and land of the exhibits to the exposition building, and in the case of exhibits which may not be sold in Chile, the government offers to pay the return freight and carriage. It also binds itself to pay the passage money both ways of operatives and workmen whom it may be necessary to take out to Chile to erect and run the machinery exhibited. The government will also provide the motive power, tables and show cases, etc. In the case of exhibits liable to the payment of import duties, twelve months' time may be allowed for the payment of these duties in the event of the exhibits remaining in the country, but if they should be sent out of the country before the expiration of that period, no duties will be levied. Application for space must be made to the Chilean legations at Washington, Paris, Berlin, Lima, Rio de Janeiro, Buenos Aires and La Paz. As mining methods and machinery in Chile are very primitive, it is thought that a promising field of commercial enterprise will be offered to foreign manufacturers by this exhibition.

A report recently presented to the Chilean Congress by the Minister of Industry and Public Works, says:

"It is a well known fact that coal abounds in our territory, nevertheless the production is barely sufficient for one-half of the consumption, the other half being imported from abroad at exorbitant prices. This condition of affairs, which is so prejudicial to the country, might be easily remedied by repealing the law which gives to the proprietor of the soil the ownership of the coal beneath it, and by throwing these deposits open to all the world. Not only ought Chile to produce all the coal necessary for her own use, but she ought to supply all the coast." The minister also says that notwithstanding the efforts of the Society for Promoting Manufacturers, it has not yet been possible to establish the iron industry in Chile. The studies ordered by the society to be made have been sent to Europe, and have been submitted to experienced metallurgists who differ in

opinion with respect to the possibility of manufacturing iron in Chile. "In the meanwhile," says the Chilean Times, "a practical Englishman has solved the problem of producing iron in Chile, and a company is to be organized which will have for its basis a concession granted by the government to Mr. Charles E. Lister."

POSTAL EXPRESS AND PARCELS POST IN MEXICO.

A concession has been granted by the government of Mexico to the Mexican National Express Company for the carrying of mail to or from any part of the Republic in envelopes specially stamped for the purpose by the General Postoffice. In the case of letters destined for some point not reached by the express company, it has the right to deliver them to the nearest postoffice to be forwarded without additional charge. Such mail matter as is not delivered shall be kept in the office of the express company three months, after which it will be sent to the head express office in the City of Mexico and be turned over by it to the General Postoffice. In return for the concession, the express company must, at any time when the General Postoffice so desires, transport its funds to or from any part of the Republic at 40 per cent discount on the rates charged to the public. The arrangement may be terminated by either party at any time by giving six months' notice.

President Diaz, in his recent message to the Mexican Congress, states that the Parcels Post Service, "which may be regarded as a new departure here," is working satisfactorily. He also says that 1,815 kilometers of telegraph wire (a kilometer equaling about three-fifths of a mile) have been put up in Mexico since April and fourteen new telegraph offices have been opened. The federal telegraph system now aggregates about 40,000 kilometers.

MISCELLANEOUS.

A manufactory of homespuns, near Horcasitas, in the State of Sonora, Mexico, is said to be developing an important industry. It is equipped with good machinery, electric light, etc., and is about to enter upon the manufacture of white goods and prints.

A new porcelain factory is about to be established at Toluca,

Mexico, by Messrs. Juan Aubert and Antonio Ramos Cadena, who have obtained a state concession for the purpose.

During the month of September, 1893, it is stated, the Mexican International Express Company shipped 50,000 oranges to the United States.

The Secretary of the Treasury of Mexico recommends the passage of a bill imposing a federal tax on all yarn and cotton goods of Mexican manufacture. The amount of the tax is to be fixed yearly by the budget law.

It is expected that the first jute factory erected in Mexico, located at Orizaba, will be completed before the end of the year.

The German consul at Puebla has founded a German colony in the Department of Palenque, Mexico. The colonists are said to be putting large tracts of land into coffee, and a number of families are expected from Germany.

W. J. Lyons, of Arizona, has secured a concession and control of the San Marcial coal mines in Sonora, Mexico. These mines are situated seventy miles from Guaymas, and are said to have seams of anthracite from three to sixteen feet in thickness.

An important discovery of coal fields in the district of Huasteca, in the city of Vera Cruz, Mexico, is announced. If the results of the examination now in progress are satisfactory, a company with \$2,000,000 capital will be organized to work the coal fields and build a railroad. The coal is said to be of excellent quality.

A movement is on foot to extend the Panama telegraph lines to San José, the capital of Costa Rica. The government of the latter country has signified its willingness to co-operate in the matter with the Panama Chamber of Commerce, which started the movement. It is thought that at no distant day communication will be opened between the cities of Panama and San José.

The government of Costa Rica has decreed an export duty upon coffee, the staple product of that country. The amount of the duty is 6s. for each 46 kilograms (101.39 pounds). The money raised by the collection of this duty is to be appropriated exclusively for the payment of the interest on the foreign consolidated debt. The duty may be paid with bills of exchange at ninety days, if satisfactory to the Secretary of the Treasury.

In accordance with a recent decree, from and after October 1, part

of the import duties of Guatemala are to be paid in national gold, and after September 15, 1894, only national money will be accepted at the public offices. The effect of this decree, it is stated, is to declare that the Peruvian and Chilean soles are not legal tender, the government refusing to accept them.

The people of the Isthmus of Panama are much interested in the announcement of Messrs. Grace Bros. & Co., of Lima and Callao, Peru, of the inauguration of an extension of the "Merchants' Line" of steamers plying between New York and the west coast of South America. The fleet consists of four vessels which sail from New York alternately every forty days and carry freight as far as Guayaquil, taking cargo at rates "to compete with sailing vessels." This action, it is thought, will result in a rate-cutting competition between the West Coast Line and the transportation companies (steamship and railroad) of the Isthmus route.

Rich gold fields are reported to have been discovered in Rioja, Argentine Republic, and as the Argentine Congress has ordered the completion of the Dean Funes and Chilecito railway, which will terminate close to the mines, there are expectations of a great revival of mining industry in Rioja.

A new telegraph line between Buenos Aires, Argentine Republic, and Valparaiso, Chile, will, in all probability, be concluded and opened to the public service by the end of the current year. The new line will compete with the existing line owned by the Central and South American Cable Company.

The visit of Mr. C. E. Howard Vincent, member of the British Parliament, to the South American countries, has for its object a detailed examination and report to the British Government as to what steps should be taken to facilitate and augment commercial relations with those countries.

Sir C. Alfred Moloney, Governor of British Honduras, has sent to the London Chamber of Commerce a collection of samples of wood cutting tools, in the hope that the attention of manufacturers might be directed to the competition in such goods which is now springing up between the United States and Great Britain for the supply of these implements. Sir Alfred suggests that it might be possible for English manufacturers to turn out as serviceable an article as that produced in the United States, and at the same cost.

The South American mails have been accelerated some twelve hours in delivery in London by the resumption by the Portuguese Postoffice Department of the use of the Sud-Express service for the mails landed at Lisbon, which service was discontinued about the end of 1891.

A systematic attempt to introduce the cultivation of the henequen fibre plant in the Bahama Islands is to be made, a company with \$50,000 capital having recently been formed in London for that purpose.

An important liquor industry is being developed in the Argentine Republic. The output of liquor from maize alone is now valued at \$15,000,000 per annum. A large quantity of spirit is also distilled from the sugar cane, and the wine business is growing.

A law has been promulgated by the Government of Paraguay allowing Indian corn to be imported free of duty between the present time and March 31, 1894.

The Uruguayan Government has entered into a contract with the Argentine mint for the coinage of \$1,000,000 of silver money.

I.

MINERALS AND RESOURCES OF NORTH-EASTERN NICARAGUA.

PREPARED BY J. CRAWFORD, LATE GEOLOGIST FOR THE GOVERNMENT OF NICARAGUA.

During the past year, commencing August, 1892, ten months of nearly continuous exploration have been made by the author, over an area of some 10,000 to 12,000 square miles in the uninhabited wilderness and jungle that cover a large part of northeastern Nicaragua, examining the geology, mineralogy and flora, existing, in great attractiveness and variety, in that part of the country. Among the numerous interesting features and peculiarities discovered or noted that are worthy, from both a scientific and economical point of view, of a more special description than was given of them in my paper "Hydrographic Area of the Rio Wanque or Coto, Nicaragua," published in *Science*, New York City, in April, 1893, are the following :

(a). The granite uplift, exposed by erosion on the tops of oval-shaped "Cerros" or mountains, and which also form the "Cima del cerro" and longer axis of long, high, mountain ridges.

(b). The numerous montonnéd ridges and lateral and terminal moraines, in series, that evidence the former existence of a glacial epoch, which covered an area of several thousand square miles in Nicaragua with a flow of glacial ice.

(c). The erosion-sculptured "Cerros," that intervene between the granite hills and montonnéd ridges, composed of debris denuded

from both the nearby granite mountains and from mountain ranges found further to the southward.

(*d*). The reefs or lodes (many of them auriferous), and dykes (of diorite), in which auriferous quartz veins are discovered piercing the mountains and ridges parallel to the length of the series of the system; and, also, the post-pleocene leads of drifts of gravels, boulders, and gold found exposed in the banks at the sides of streams, and that appear to extend through the erosion-sculptured hills near their base; and the alluvial leads, drifts of gravels, gold, etc., found in the channels of the creeks and in strata in the lower parts of valleys.

(*e*). The composition and fertility or non-fertility of the soil and its fitness in places for the vigorous growth of certain kinds of trees or plants; also, the peculiar formation where groves of some kinds of valuable trees were found growing to large dimensions.

(*f*). The apparent geological history of the granite hills, dykes, reefs, lodes, montonnéd ridges, erosion-formed ridges, and of the leads or placer mines.

The region in northeastern Nicaragua, chosen for description in this paper as typical of a few others in that part of the country, is a wilderness unoccupied by man,* and, although this locality is a part of Nicaragua, neither the Government nor the citizens of that country have even a vague conception of its importance and its truly great undeveloped wealth in valuable minerals and metals, timber, and agricultural lands. The centre of this chosen locality is about longitude 85° W. (from Greenwich), and latitude 14° N., and the area embraces the headwaters of "Nawawass," "Wilson," "Loccus," "Umbra," "Waspoopoo," "Moorawass," "Lang Sang," and "Daka" creeks and "Washpook" river, confluent to Rio Wanque or Coco River, and also the line of "Cerros," about sixty miles long, just south of the Washpook River.

* Recently, two or three Latin Americans have, in a crude way, simulated placer mining work in one or two of the mineral localities. They appear hopeful and cheerful.

The granite masses appear to be in two parallel lines of elevation, but connected together as one mass and composed of rock of the same mineral composition, usually amphibole. Syenites (with and without quartz) and, also, protogine and plagioclase varieties, appear most numerous. The cooling has permitted the crystallization of the minerals so similarly at about the same depth from the surface in isogeothermal zone in each line of ridges as to indicate that the two exposed lines were of the same mass and lowering in temperature at the same rate. The granite has been exposed by erosion, and the hills also have been eroded deeply at many places, and the rocks have, at several places observed, become disintegrated and decomposed, in situ, to depths of from five to twenty feet. The exposed granites are in series of spurs and of ridges that extend northeastwardly for about ninety miles from the Bar-Bar mountains, at the southeastern termination of the Matagalpa system of mountains, and form an angle of about 120° with the southeasterly and northeasterly direction of that mountain system which is composed largely of archaean and silurian era rocks.

The northeastern termination of these granite spurs and ridges is near to the confluence of the rivers Washpook and Wanque, at a distance of about one hundred miles west from the Caribbean Sea, on the eastern coast of Nicaragua, and about the same distance south from that sea on the northern coast of Nicaragua. The forces causing this upheaval of granite, appear to have also fissured the super-imposed and adjacent systems of rocks for many miles*. These fissures are filled by deposition of minerals and metals from hot solutions, and are now reefs or lodes containing quartz, gold, metallic ores, and other minerals. Near the northern termination of these granite ridges, were found patches of varying size of auriferous sands, gravels, clays and boulders, detritus transported by water from the denuded granite hills, and from ranges in the Matagalpa system of mountains. These deposits of detritus increase in size north-

* It is very difficult, frequently impossible, to trace the extent of the outcropping of lodes or reefs, and even of dykes, in this wilderness of dense growth of trees, vines and plants, and a deep soil.

wardly, until covered by the sands and mud composing the delta of the Rio Wanque. On the west, the deposits of detritus were in large quantities, and, subsequently, have been sculptured, by erosion, into hills and ridges. Also, found resting in small areas on the granite ridges, are boulders, in size, from a few pounds to over two hundred pounds each, of varieties of blueish glaucophanite or hypersthene, and augite or trachyte like rocks that appear thickly sprinkled with pyrites, and magnetic and titanite iron ores. These were weathered toward their centres, from one to three inches, and were found to be auriferous, in some instances highly so. They differ in composition and color from the hornblende and orthoclase granite mass forming the axis and serrated ridges of the hills; also from the boulders mixed with the patches of clay, sands, gravels and boulders that are found, but to the southward, on these granite hills and ridges. This filling up of former existing valleys with the materials worn off from, in part, the granite ridges, evidences a subsidence in that locality at the time, and this evidence is supported by the existence, to the north of the granite hills, and between them and the Wanque or Coco River, of a disconnected line of limestone. On one depression of this limestone, deposits of auriferous clays, sands, gravels and boulders were found. The eroding into hills and valleys, as they at present appear, of the mass of detritus of disintegrated granites, etc., is evidence of a subsequent elevation of that entire region and the completing of one oscillation of subsidence and of re-elevation there.

The montonnéd ridges extend for about sixty miles in a series of parallel, oblong ridges, northeastwardly from near the base of the tall Bar-Bar and Peña Blanca Mountains, that at present have an altitude of over 7,000 feet above the Caribbean Sea. One of the projecting lines of moraines extends further northward, and is about ninety miles long, until it terminates at a dyke on whose sides auriferous gravels are found, in which the Rio Wanque has cut its channel at San Ramon. This system of montonnéd ridges extends to a width eastward and westward of about twenty-five miles and has, at present, an altitude above the creeks at their base of from 70 to

400 feet. They were found to be composed most generally of unstratified clays, sands, gravels and boulders. Occasionally, however, these materials are partly stratified and partly assorted.

The enclosed boulders are of various sizes from ten pounds to several tons weight, and are usually angular or subangular, becoming oblong and oval as the series of montonné ridges extend northward, *i. e.* towards the Wanque River, and are composed most generally of fragments of auriferous quartz, granites, syenites, hornblendic feldsparic rocks. These montonné ridges have been denuded and eroded by the very energetic and potent meteorological forces in this locality, until numerous large boulders have been displaced and lie on the sides and at the base of the ridges; also, numerous gullies score deeply the sides of these ridges and deep ravines or channels of the flowing creeks separate many of them from each other. These montonné ridges are unquestionable evidences of a glacial epoch and of a long continued glacial flow at this low parallel—only 14° north from the equator,*—which covered quite a large part of the present narrow divide of land (containing about 48,000 square miles) between the Pacific Ocean and the Caribbean Sea. Adjoining the granite hills on the northward and northwestward, often between the montonné and the granite ridges, are a number of erosion-sculptured hills that have been carved out by the draining forces attending the elevation of lands at that locality and evidence that elevation, and subsequently, by meteoric forces. These hills of erosion are composed of the detritus of rocks transported by water from the southeastern ending of the Matagalpa system of mountains (a distance of seventy or eighty miles) southwest, and of materials eroded from the adjoining and nearby series of granite hills. The materials composing them have been cemented and concreted into semi-hard rocks and conglomerate masses of

* At latitude $12^{\circ} 30'$ north from the equator, similar montonné ridges and glacial epoch moraines were discovered on the south side of the southeastern termination of the Matagalpa system of mountain ranges, and were examined, by the author of this paper in 1890, and reported on to the British Association for the Advancement of Science; the American Association for the Advancement of Science; and, officially, to the Government of Nicaragua.

clastic rocks. The altitude above the Caribbean Sea of many of these granite ridges, erosion-formed "Cerros" and montonné ridges is from 1000 to 3500 feet. All are covered with a dense growth of large trees, or in some places, on the erosion-formed ridges, with a jungle of trees, bamboos, vines, and other vegetation.

The reefs or lodes strike east of north and west of south, parallel to the long axis of the ridges and mountains, and those discovered usually dip at an angle of 120° south. They are from six to thirty inches wide and usually appear to be rich in gold and in metallic sulphides and arsenides. The reefs at the granite ridges are parallel with those ridges and formed at the contact between the granite and superimposed rocks (though some appeared to be in the granite) as principal lodes from which extend, at various angles, into the adjacent erosion-carved "Cerros," many fissures containing the oxide of metals, gold, sulphides, &c. Some few of the fissures appear to continue northwardly into montonné ridges, but this was not verified because of the deep soil and dense undergrowth that cover the surface of the hills and valleys at that locality. The reefs parallel with the granite ridges extend southwestwardly to near the Bar-Bar Mountains, where they appear to form an obtuse angle with the auriferous reefs or lodes that extend, (S. E. and N. W. across Nicaragua) along the foot hills of the Matagalpa system of mountains, from the Caribbean Sea to the Pacific Ocean. In the granite hills, were discovered two large deposits of iron ores (limonite and hematite) and one deposit of manganese ore (the black di-oxide-pyrolusite); also, graphite and some tin sulphide (stannite) whether in paying quantities or not, *i. e.*, profitable to mining, has not been determined satisfactorily, because they were found but recently (this year, 1893) in an uninhabited wilderness. They are, however, in a thoroughly mineralized locality. The auriferous reefs are of the "dioritic-gold-evolved-era" (as classified by David Forbes, F. R. S., in his paper "On the Geological Epoch at which Gold has made its appearance in the Crust of the Earth")* and appear at the surface often where many greenstone rocks were discovered.

* See London Geological Magazine, 111, p. 385-7.

The auriferous placer deposits or leads of clays, gravels, sands, gold and boulders are of different geological epochs, viz: The strata of partly cemented auriferous drifts of sands, gravels, &c., exposed in patches, small to several acres, at the sides near the base of the erosion-formed hills, and appearing to pass through those hills, and also found in the upper valleys at varying depths beneath the surface, and at many places exposed in the banks along the sides of the creeks. These leads of gravel drifts are from eight to twenty inches thick, and although few masses of gold, visible to the unaided eye, were observed in them, yet when washed out from a pan, there were frequently left in the pan, particles, grains, and small nodules of gold or occasionally laminated small masses of gold, that were angular, subangular and oval in form. These are "alluvial drifts" or gravel beds formed during the latter part, I am inclined to believe, of the champlain epoch usually containing only a small per cent. of subangular and partly rounded quartz. The gold found in them is in rather coarse grains and particles, as described, and is evidently derived from three sources:

(a.) The auriferous reefs that traverse that part of the country.

(b.) The deeply disintegrated granite masses.

(c.) And the disrupted masses of quartz, pyrites, &c., that once were enclosed in the montonné ridges and subsequently eroded therefrom. The gold is believed to be in quantity sufficient to be profitable to mining operations, especially because the mining could be done economically by water which is convenient, abundant, and has a rapid fall or descent in the nearby creeks.

The alluvial beds of auriferous clays, sands, gravels, and small boulders that are found in the beds of some of the gulches and in the channels of some of the present system of creeks, are often partly cemented by hydrous oxide of iron, in some places, and by silica at other localities. These deposits were commenced, I am persuaded, during the terrace epoch, and, in some places, are apparently quite rich in gold of rough, semi-angular pieces, and in rounded particles. Some of the particles of gold in the small creeks, or nearly dry gulches, appear so angular and undisturbed at their edges, as to

impress one with the opinion that they have been increased in size where they are discovered by additions from passing solutions containing gold. The chief sources, however, of the gold found in these creeks are the same as those named under the head of reefs or lodes, with additions of gold from the older leads, above described, found in the upper, and apparently passing through the erosion-formed hills, and from accretions of gold deposited from passing auriferous solutions. The bedrock, in some of the creeks, is an iron-cemented arenaceous-argillite resting on a bed of partly cemented boulders, sands and clays, which appear, at one place discovered, and, probably, in the entire locality, to rest on strata of auriferous conglomerates or breccia, and this on an auriferous gravel superimposed on a bedrock of metamorphosed shale or slate.

Geological History. I found several obstacles to prevent, at present, that careful examination necessary to determine the geological epochs. The questions unanswered are: When these granite ridges were upheaved and when, thereafter, they were exposed by the denudation of superimposed strata? During what epoch did the regional elevation occur and when were the erosion-sculptured hills in that region found? From what rocks, or sources, came the gold found now in the reefs, or lodes, traversing, longitudinally, the mountains and ridges? One obstacle is that no ravines nor cañons were discovered that exposed deeply enough the strata towards the centre of the mountains or ridges.

Other obstacles are the very deep disintegration, in situ, of the exposed rocks and the deep soil covering the surface, and also the dense vegetation, frequently a jungle difficult to cut a pathway through, covering in matted masses even the nearly perpendicular sides of ravines. But, tentatively, and from the clearest examinations I could make, I gather the following geological history of this locality:

1st. The granite in the hills and ridges was forced up through the jurassic period and later rocks, and it upturned to nearly vertical the superimposed strata, in some of which were discovered moulds of silica (lined with small crystals of quartz), like the "Trigonia Con-

rade"; also others like moulds of "*Yancredia Warreniana*." The fissures, also the dykes of diorite, appear to have resulted from disturbances occurring in epochs post-oolitic but not extending later than the cretaceous, this being the latest known or generally recognized time or period during which gold has been conveyed in large quantities, or percentages, as a constituent, in granite and diorite, up to the earth's crust. These auriferous granites and diorites are certainly abundant in this region, and are not palaeozoic nor cenozoic rocks.

The gold in the reefs or lodes has been dissolved from the granites and diorite rocks by hot mineralized waters, and deposited therefrom into the fissures or reefs, on cooling or on deoxidation of the solutions, either enclosed in pyrites or as free gold.

The gold in the placer mines, drifts or leads appears to have been derived almost entirely from the disintegrated and denuded granites forming the mountains and from the reefs in the mountains. A small percentage of the alluvial gold is, however, from the small areas or patches of auriferous quartz, eroded from the montonné ridges; also, a small percentage of gold has been deposited from passing alkaline waters that contained gold in solution.* The patches of auriferous quartz found generally at the base of the montonné ridges, as if eroded from them, appear to have been transported (with the other materials composing the montonné ridges) from auriferous reefs in the ridges forming the southeastern part of the Matagalpa system of mountains. The boulders of blueish-colored rocks, auriferous and containing a large percentage of pyrites, found quite frequently in that region, are usually some variety of the soda-bearing hornblende rocks like glaucophanite; although blueish trachytes, also blueish hypersthene boulders, some of them auriferous

* Gold being invariably found in the granite series of rocks, especially those of palaeozoic and mesozoic eras and early tertiary period, should, I am inclined to believe, influence us to recognize the gold as a constituent, not merely an accessory mineral in the rock.

The fact of the existence of gold in rocks of the granite series appears to give support to the theory of the successional deposition of the elements in the earth—those of greatest specific gravity being nearest to the earth's center. Platinum, gold and iron appear to have been brought to the crust of the earth in every upheaval of granite masses.

(probably all of them), were discovered. Some of the very interesting observations noted were :

(a). The altitude above the Caribbean Sea (aneroid readings) of several of the hills and ridges in the region herein described is from 1000 to 3600 feet; consequently, the flow of water to the Carribbean Sea, only 90 or 100 miles distant, is very rapid; there being no swamps except those of brackish water in the delta of the rivers. This rapid descent of water from the mountains over numerous rapids, cascades, and falls in the creeks and rivers, offers many places where great water power or pressure could be had to move machinery for sawing logs, defibrinating plants, mining, &c.

(b). The region, excepting the clay surfaced montonnéd ridges, is covered from two to twelve or more feet deep with a very fertile soil, composed in large percentage of partly decomposed vegetable matter (nitrogenous) and potash, and other alkaloids, and alkaline earths from the alkali-containing rocks-granite, feldspar, &c. Consequently, they are excellent agricultural lands for corn, potatoes, coffee, tobacco, almonds, &c., on the sides of the hills and ridges; and for sugar cane, plantains, bananas, cacao, &c., in the valleys.

Some of the mountain lands are admirable for coffee, and in the upper valley lands, indigenous cacao (*Theobroma*) trees of good varieties are numerous.

(c). The climate is warm but not uncomfortable; no lagoons nor swamps in the hilly region.

(d). On the mountain ridges, grow forests of large trees, among which mahogany, cedar, rosewood, sapote (*Ulva Sylvestre*) iron-wood, guanacaste and nispero, appear to be the most numerous.

The Tuno trees* are also numerous and of large size, and young,

* The Tuno tree exudes freely, when scarified, a milky juice appearing like the milk or sap that flows from lacerations in an India rubber tree, but concreting into a gum-like guttapercha. The inner bark is a texture of strong interwoven fibres and can be removed from the tree in pieces as wide as the circumference of the tree (from 3 to 6 or 6½ feet) and 20 to 40 feet long. The Soomoos and Sambos use this bark as bed clothing and as clothing for their bodies. They prepare the bark for these purposes after removing it from the tree by wetting in water and softening by beating it with sticks when it becomes soft and remains very strong.

vigorous-growing India rubber trees (*Syphonia Elasticus*) are very abundant, while in shaded, moist places, the surfaces of disintegrating rocks are frequently covered with a beautiful velvet vine of Nicaragua (first discovered about 1856, in Nicaragua) having its exteriorly pure white, trumpet-shaped, velvety flower, tinted with various clear colors of purple, golden, pink, etc. Orchids in great variety are numerous. Ferns of all sizes, up to trees twenty feet high, are abundant. This wilderness contains much undeveloped wealth in its export varieties of trees, medicinal and fibrous plants, its undeveloped minerals and metals, and its very fertile agricultural lands, and has much to interest scientists, especially naturalists.

J. CRAWFORD.

WANQUE OR COCO RIVER, AT SAN RAMON, NICARAGUA,

July 30, 1893.

NOTE.—It is worthy of note in reference to the northeastern coast line of Nicaragua.

(a). The northeastern coast of Nicaragua, adjacent to the mouth of Coco River at Cape Gracias, is subsiding, resulting in the gradual filling up with silt, mud, etc., conveyed through a natural canal, from the Coco or Wanque, of the lagoon, a few miles south from the mouth of the river, on the margin of which the small village of "Cabo Gracias" is situated; also, resulting in deepening the channel from the river to the sea.

(b). The long, low ridge of fragments of white quartz rocks, that have been transported by floods down the river and deposited on the southeastern side of its channel into the sea, appear, now, to form a protection to the channel against the sands that, heretofore, were moved into, and partly filled up that channel, by storms coming from the east and southeast.

J. CRAWFORD.

LEON, NICARAGUA, October 10, 1893.

NITRATE DEPOSITS IN COLOMBIA.

PREPARED BY C. F. Z. CARACRISTI, C. E.

I have the honor to submit, for the use of the Bureau of the American Republics, the following report on the nitrate beds of the Val du Par, lying between the spur mountains of the Sierra Nevada de Santa Marta, in the Department of Magdalena, Republic of Colombia, South America.

The nitrate beds of Chile and Peru have, for a number of years, been coveted as properties of vast value, and have added, not only to the wealth of the operators, but to that of the country in which they are found. "Potassium nitre" is found in caves mixed with the stalagmitic formations that cover the walls and floor, and in this form, was much sought for in the earlier days of American civilization. It was used then, as now, in the manufacture of gun powder, and formed quite an industry, which has since disappeared; yet in India, where labor is cheap, the collection of sedimentary "saltpetre" continues. In the same country, it is also obtained in large quantities, for exportation, by the evaporation of nitrogeneous water collected from "seeps," after the same manner as salt is produced.

The nitre produced in Chile, however, differs from the sedimentary nitrate, and is known in mineralogy as "Nitrotine," or soda-nitre, and its component parts are nitrogen pentoxide 61.891 per cent. sodium (soda) 38.109 per cent. = 100 per cent. It somewhat resembles nitre (saltpetre), but more readily deliquesces and burns on coals with a yellow flame.

In the district of Tarapaca, a Peruvian province now occupied by Chile, it is found in the dry *pampas* extending over forty-five leagues. Here, it is mixed with sodium bichloride (common salt), magnesium carbonet and shells of very recent origin. This nitrotine is converted into regular nitre, or saltpetre, by the displacement of the sodium and the addition of the required amount of potassium. It is

also found and worked in the great desert of Acatama, Chile ; but in these regions, it is found as an incrustation in the earth of decomposed porphyritic rock, and was doubtlessly of feldsparic and calcium origin. No shells are present, and no sign of sedimentary action is here visible. These beds have, of late years, attracted great attention, although they lie at a considerable distance from transportation. Nitrate is used largely in the industrial arts, is a splendid fertilizing medium and is the base of nearly all known explosives, because the nitrogen pentoxide stands in mutual repulsion with all other substances. And while its atoms will readily combine with atoms of other bases, the least chemical convulsion will instantaneously bring about a separation of the two or more bases and produce explosion. It is the explosive base of gun powder, gun cotton, nitro-glycerine, Americanite, giant powder, etc., etc.

This prelude was deemed necessary to show the importance and value of the product. The nitrate deposits I discovered in Colombia are of a nature identical with those of Chile, and I have but little doubt that thorough exploration would show the deposits to be almost as extensive as those of that country. My own investigation showed the existence of about thirty miles square of nitrate beds, having a thickness of from one to ten feet.

The stratum carrying this nitre is a bed of slaty gypsum (calcium sulphate), in which are embedded large quantities of shells (calcium carbonet), iron oxide, salt and magnesia. The vein lies at a depth of from eight to twenty feet below the surface and rests upon the carboniferous sandstone of the region. It is very evident that the deposit is of recent date, and that the nitrate was produced by the chemical reaction of vegetable and other substances operating on the lime in its various forms. The only visible difference between the nitrate of Colombia and Chile is that the nitrification has, in part, been produced by the phenomenal functions of the microscopic plant which is closely allied to the "bacteria" so common to the cave and Indian nitre.

I would estimate the visible supply at over 7,372,800,000 tons of nitrate material, assaying from 1 to 13.50 per cent. nitrate.

The carboniferous sandstone has prevented the filtration of the nitre, and the gypsum has, in part, been a protection to the substance. The nitre itself is of a yellowish or light brown color and is found in crustations between the slaty layers of calcium sulphate. In its purer state, it is of a white color, translucent, micaceous and arborescent, and sometimes transparent, and having a hardness of 1.96; gravity 2.01. When crystals are found, the analysis is:

Nitrate of Soda.....	23.90 per cent.
Chloride of Soda.....	34.05 "
Sulphate of Calcium.....	8.46 "
Sulphate of Alumina.....	3.41 "
Magnesia	trace.
Insoluble Silica.....	24.68 "
Water.....	5.50 "
Total.....	100.000 "

But the average deposit, taking the vein as it comes without picking or other separation, would give the following average, which I consider very promising from a commercial standpoint:

Nitre	11.406 per cent.
Calcium Carbonet.....	32.516 "
Calcium Sulphate.....	20.121 "
Silica.....	32.412 "
Calcium Phosphate	2.500 "
Ferro-oxide.....	.025 "
Vegetable Matter and Salt.....	1.020 "
Total.....	100.000 "

The above shows plainly that the deposit is, in its crude state, a fertilizer of the best quality. The calcium phosphate is fossilized bone. I must also note that large quantities of iron pyrites are to be found in the archaic formation of the adjacent mountain, which give over 42 per cent. sulphur and which would make the manufacture of fertilizer in the region a great industry.

The manufacture of nitric acid could also be made an industry of importance and profit.

The deposits lie at a distance of about sixty-five miles from the city of San Juan de la Cienaga and are, in part, on the waters of San Sebastian River, which flows into the great sea level lake of

“Cienaga Grande.” Navigating communication could be established with the nitrate beds by conducting the waters of the Aracataca River into the San Sebastian. This work would cost not in excess of \$5,000, as a canyon already exists connecting the two rivers. By this work, a draft of about six feet could be carried from the falls of San Sebastian River to Pueblo Viejo, from which point navigation communications already exist to Barranquilla and Santa Marta. When the Santa Marta R. R. shall be completed to the village of Fundacion, the nitre beds will be only half a mile from the road. The road is now in running order from Santa Marta to Rio Frio, and about six miles are graded beyond Rio Frio in the direction of Rio Savilla. This leaves about thirty-five miles of road still to be built at a cost of \$105,000, to which amount the Colombian government, according to its original contract with Senor Don Manuel J. de Mier and his successors, is to contribute about \$30,000.

It is quite obvious that the development of the nitrate industry on the Atlantic coast of South America would mean a great saving in the cost of transportation of the article to both Europe and North America, and the American farmer who has to buy fertilizers would be highly benefited by the advantages offered by the nitre beds of Colombia. The reduction of the cost of fertilizer has been a question of great moment to the American farmer—so much so that in nearly all the agricultural states, legislation has been enacted, having in view the reduction of cost and the assurance of the purity of fertilizing compounds.

Investigation, made by state and federal authorities, has proved the fact beyond dispute that the agricultural possibilities of certain localities of the United States are largely restricted and governed by the cost and power of the fertilizer offered for sale. It is, therefore, obvious that the reduction of the cost of nitre and other alien fertilizing substances would redound to the great advantage of the American farmer, with whom the question of cheap fertilizer is one of too much importance to be over estimated.

The cost of producing and delivering one ton of caliché, or crude nitre, at Pueblo Viejo would be about \$2.50, and the cost of ship-

ment to the United States would be \$3.80, delivered in New York, making a total of \$6.30. This estimate is on the material in its crude state, and as it would take eleven tons of caliché to produce one ton of nitrate of soda, at a cost of \$69.30, and the present market value would be only \$50.00, it is evident that it would be necessary to separate the nitre before shipping. I estimate the cost of separation, mining and transportation to New York City at from \$8.31 to \$11.00 per ton. Then, besides the nitrate of sodium, we would have calcium phosphate (land plaster), an excellent fertilizer, 4,600 lbs., calcium phosphate 550 lbs., sodium bichloride (common salt), and vegetable matter 220 lbs. The above would be the residuum or bye-products remaining after the refining process of the caliché has been gone through with. Or, to put it more plainly, we would have 7,370 lbs. of fertilizing substances out of a possible 22,000 lbs., and of the residuum remaining, one-half would be calcium carbonet (ordinary lime).

In conclusion, I beg to state that I have every reason to believe that franchises, or grants, will be given by the Colombian Government to any responsible individual or corporation that might guarantee to work the nitrate beds of that country.

MANGANESE MINES IN COLOMBIA.

In a letter to Mr. C. F. Z. Caracristi, Consulting Engineer, Mr. Eduardo J. Chibas, Superintendent of the Caribbean Manganese Company, writes :

"I take pleasure in complying with your request by forwarding you some general information with respect to the Colombian Manganese Mines. The principal manganese deposits are found about forty-five miles N. E. of Colon, going towards the San Blas point, in the Department of Panama. They were first examined in November, 1891, when I was sent down, in the joint interest of the Carnegies, of Pittsburg, and the Illinois Steel Company, of Chicago, to investigate and report on that mineral region. My examination revealed

that the most important deposits are those known as the "Nispero" and "Soledad" claims, which are adjoining each other, and which, in reality, form only one and the same large deposit. This ore belt extends from N. N. E. to S. S. W., and covers an area of about half a mile in length by a quarter of a mile in width. It starts near the foot of the Nispero mountain, about two hundred feet above sea level, ascends along its flank, crosses the backbone of the same mountain at seven hundred feet above sea level, and descends the other side until it reaches an elevation of three hundred feet above sea level. The ore is found in the shape of boulders imbedded in clay and distributed along the ore belt. These boulders vary in weight from fractions of a ton to fifty, one hundred, three hundred and four hundred tons, and, sometimes, they are associated with jasper. The average analysis of the samples commercially selected have given the following result:

Manganese, from 49.6 to 57.02 per cent.

Phosphorus, from 0.04 to 0.06 per cent.

Iron, from 1.71 to 3.29 per cent.

Silica, from 1.06 to 7.86 per cent.

"A company composed of Baltimore capitalists was organized to develop those mines, and a railroad from Viento Frio, on the coast, to the Nispero deposits has already been located and is now in progress of construction. The line is six and a half miles long, with steep grades and sharp curves.

"There are many other manganese deposits in that neighborhood, but as they are almost completely underground and with very few surface indications, their commercial value has not yet been ascertained; but strong probabilities seem to indicate that thorough prospecting with a steam drill will reveal some valuable ore bodies."

EDUCATION IN URUGUAY.

The Bureau of the American Republics has received from Mr. Alberto Gomez Ruano, Director of the Pedagogic Museum and Library of Montevideo, Uruguay, a collection of views of that institution. In a letter accompanying them, Mr. Ruano says :

The Pedagogic Museum and Library of Montevideo is a National Institution, created and sustained by the Government of Uruguay for the purpose of demonstrating the advancement of the said country in the branches of education and public instruction, and also to show the advancement made by other nations.

The Pedagogic Museum and Library is a permanent exposition, of free entry, open to the public every day from 8 A. M. to 6 P. M., where are exhibited all kinds of school material adopted by the authorities entrusted with the education and instruction of Uruguay, as well as all kinds of objects and publications used in the schools, which have been contributed by the manufacturers, editors and governments of those nations which are at the head of the educational procession.

Foreign merchants, manufacturers of school desks and other kinds of school furniture, as well as publishers of maps, plates, books, etc., may send to the Museum collections of samples, together with their catalogues, and the Director is bound to exhibit them to the public and recommend them to the school authorities, and also to the directors of educational establishments and merchants of Uruguay, it being his duty, not only to do all this gratuitously, but to keep up the correspondence and give all the information asked of him whenever necessary, in accordance with the object of the Museum.

This, as you will understand, is very useful and advantageous to the manufacturing and commercial interests of the United States of North America and the republics of the River Plate.

II.

COFFEE INDUSTRY IN HAITI.*

A New York importing firm furnishes the following statement as to the coffee industry in Haiti: The coffee plant was introduced into Haiti in 1727 by French colonists. It is said to have been brought directly from Arabia, and Haitian coffee has well preserved, when properly prepared, the exquisite aroma and flavor of the Mocha coffee.

The climate and soil of Haiti are exceedingly favorable to coffee culture, the country being very hilly and mountainous. The production increased rapidly during the French occupation, the exports of coffee reaching—

In 1755,	-	-	-	-	-	7,000,000 pounds.
1767,	-	-	-	-	-	15,600,000 “
1776,	-	-	-	-	-	32,200,000 “
1785,	-	-	-	-	-	57,400,000 “
1789,	-	-	-	-	-	76,900,000 “

Since the independence of the country, in 1803, coffee culture has greatly suffered by the frequently recurring revolutions. In fact, it may be doubted whether any coffee plantations, as they exist in other coffee-producing countries, have since then been cultivated from virgin soil. The inhabitants simply took possession of the highly-cultivated plantations abandoned by the French colonists, and coffee growing wild is found to a large extent all over the country.

*For general review of Coffee Industry in America see Bureau Bulletin, October, 1893.

The exports of coffee from 1820 to 1830 dwindled to about 23,000,000 pounds a year average. Since then, a gradual increase has again taken place, and the statistics show an export—

In 1890,	-	-	-	-	-	56,700,000 pounds.
1891,	-	-	-	-	-	79,400,000 “
1892,	-	-	-	-	-	67,800,000 “

The preparation of coffee for market is of the most primitive kind. The berries are dried on the ground, and the outer skins are removed by beating in wooden or stone mortars. The transportation of coffee from the interior to the seaports is done in small quantities, carried by donkeys or the small Haitian horses, and it takes sometimes two days to make a trip, the roads being very bad and railroads being unknown in that country.

The Haitian Constitution prohibits selling land to aliens, and for this reason no large coffee plantation exists in Haiti, the inhabitants being too indolent, or not having the means to cultivate them.

Some twelve years ago the Haitian Government granted to the Messrs. Simmonds, Frenchmen, the privilege of erecting coffee machinery at the port of Petit Goâve, where the berries have since been properly prepared by the most improved machinery, as it is done in Brazil. It is stated that large profits have been realized therefrom, and the same gentlemen have, since then, erected additional plants at different towns.

About three years ago, an American Company, the Usine Centrale, at Petite Rivière de Nippes, also obtained the privilege of establishing a plant for the proper preparation of coffee by machinery, and it is doing well; but, unluckily, all these fine coffees are now being shipped to Europe, in consequence of the discriminating duty placed on Haitian coffee by the U.S. Government.

No doubt, there is an extensive field for the culture of coffee in Haiti as soon as the country devotes its energies more closely to the improvement of its internal affairs.

Haiti has excellent facilities for exporting coffee at eleven ports, of which Port au Prince, Jacmel, Cape Haitien and Gonaïves are the principal ones.

The coffee culture in Santo Domingo, the eastern part of the island, is comparatively insignificant as yet, producing about 500,000 pounds a year. The product was—

In 1875,	-	-	-	-	-	240,000 pounds.
1876,	-	-	-	-	-	150,000 “
1877,	-	-	-	-	-	732,000 “
1878,	-	-	-	-	-	118,000 “
1879,	-	-	-	-	-	554,000 “
1880,	-	-	-	-	-	840,000 “
1881,	-	-	-	-	-	1,289,000 “
1882,	-	-	-	-	-	492,000 “
1883,	-	-	-	-	-	345,000 “

COFEEE CROP OF GUATEMALA.

The coffee crop of Guatemala for 1893 will not be so abundant as was anticipated. There has been an extraordinary rainfall since the early part of last April, and in some districts, the coffee berry shows signs of shrivelling, as the result of excessive moisture and insufficient sunshine. It is estimated, however, that the crop will reach 55,000,000 pounds, a slight excess over last year's production. The want of sufficient labor has interfered materially with the development of the coffee industry in Guatemala. A trial of Japanese laborers is about to be made. The Gilbert Islanders, imported last year, have not proved a success.

COFFEE LANDS IN MEXICO.

Land in the districts of Cuicatlan and Teotitlán del Camino, State of Oaxaca, Mexico, suitable to the cultivation of coffee and other export articles, has been greatly developed. It is predicted that the extensive zone comprising these districts will shortly attain great agricultural prosperity, as the persons at the head of the principal undertakings are thought to be energetic and capable.

INDUSTRIAL PROGRESS IN GUATEMALA.

Recent information indicates that affairs in Guatemala are steadily improving. The financial obligations of the Government are being met with the utmost regularity. During the month of September, 1893, \$80,000 of the bonds of the Internal Debt, which amounts to \$1,600,000, and \$60,000 of the Floating Debt, for \$3,000,000, with \$8,800 of a loan for constructing aqueducts in the capital, were redeemed. Besides this, the Government remitted \$78,750 to London for the service of the Foreign Debt; \$82,000 of Treasury bills were paid off, and \$253,000 paid on account of arrears of salaries of employes. "When account is taken of the fact that Guatemala, like the rest of the world, has been suffering from a commercial crisis and the depreciation of silver," says the South American Journal, "these facts appear to be highly creditable to those responsible for the management of its finances."

Some important industries are being developed in the country. The manufacture of cotton cloth has been established with most satisfactory results, and some paper mills, recently opened, have been so successful that it is hoped that all the ordinary classes of paper used will soon be supplied from home manufacture. Brick and tile works are numerous, but can only produce the common classes of materials. Attempts, more or less successful, have also been made to establish factories for carriage building, wool weaving and tanneries. The great trade of the country will, however, for many years to come, be the exportation of produce.

Guatemala coffee is well known in every market, but, principally in that of the United States, and many other tropical plants are cultivated on an extensive scale, such as sugar and tobacco. But the resources of the country in raw materials, textile and medicinal plants, mines and timber have scarcely been touched as yet, and all that is wanting to derive a large revenue from this source is assured peace and increased immigration. Trade has recently shown symptoms of steady increase. In 1892, 157 steamers and 14 sailing ships entered the port of San José, 151

steamers and 12 sailing ships entered the port of Champerico, and 55 steamers and 7 sailing ships entered the port of Ocos. This shows a trade of considerable magnitude, and the figures for this year will be much higher. The larger number of these vessels bear the United States flag.

RAILROAD DEVELOPMENT.

To complete the Transandine Railway, which would give uninterrupted communication between points in Chile and Buenos Aires, the capital of the Argentine Republic, it is necessary to build only 33 kilometers ($20\frac{1}{2}$ miles), as trains can now run over 1,189 kilometers out of a total of 1,222 miles. The Argentine section will be completed during the current year as far as Puente del Inca, so that in 1894 there will remain to be constructed 15 kilometers, including two tunnels at the summit. Work on this remnant of the Argentine section will be commenced as soon as the line on the Chilean side is sufficiently far advanced to permit the work being prosecuted in such a manner that the two sections—the Argentine and the Chilean—shall be finished at the same time. Thus, the only obstacle to the completion of the road has been the lack of satisfactory arrangements for constructing the Chilean section. The contractors, John and Matthew Clark, having found it impossible to raise money for this link under the guarantee of the Chilean Government, asked the Chilean Congress to increase the guarantee from 4 to 5 per cent., and this having been done, it is said there will be no difficulty in completing the road.

The Chilean Congress has granted a concession for a railway to connect the Southern Line of Chile with the Argentine Great Western at La Paz. The road will be mostly in Argentine territory, namely, 175 miles from La Paz to the Andine pass of Tinquiririca and 75 miles further to a point on the main trunk Southern Railway, between San Fernando and Curico. The road is expected to be of special use for the valuable cattle trade across the southern passes of the Andes into Chile.

From a report by Mr. C. C. Mallet, British Consul at Panama, it appears that steady progress is being made in the construction of the important railway from Cartagena to Calamar, on the Magdalena River, in Colombia. The concession for this road was obtained in 1889 by Mr. S. B. McConnico, representing some American capitalists. The funds for the enterprise were raised in the United States, but work was delayed for nearly three years because of the difficulty experienced in securing an amount sufficient to complete the road. Construction was commenced in June, 1892, and one year later, June 15, 1893, the first section of the railway from Cartagena to Turbaco, a distance of 14 miles, was formally opened. The next section to Arjona, 8 miles, was to have been opened in October, and it is expected that the road will be completed to Calamar by June, 1894. At the time of Consul Mallet's report, in September last, 1,800 men were at work on the road. The road is being built with care and is equipped with the best American cars and locomotives. The distance from Cartagena to Calamar is 65 miles. Most of the land adjacent to the line is suitable for fruit culture and cacao. The trade from the upper Magdalena, a large part of which, it is hoped, will be diverted to the port of Cartagena, is expected to give the road substantial profits. The completion of the line will, it is predicted, result in an active competition between Cartagena and Barranquilla which, hitherto, has had superior advantages, owing to its ready means of access by the Magdalena River to important agricultural, mining and commercial regions.

Work to complete the unfinished gap on the Tehuantepec Railroad, Mexico, about 60 kilometers (37.28 miles), is being arranged for by Mr. Chandos Stanhope. It is expected that work on this road across the Isthmus will soon be resumed, and efforts will be made to complete it by the month of May, before the rainy season sets in.

A concession has been granted to Ignacio Cevallos for the construction of a railroad from the city of Mexico to Chapultepec, Tacubaya, Dolores Cemetery, Molino de Valdes, Molino de Belem.

and Santa Fé, terminating in Las Cruces, at a point on the boundary line of the Federal District, with the privilege of building a branch to El Desierto. The track is to be narrow gauge.

The Mexican Government has granted a concession to Mr. Francis Harold Woodhouse for the construction of a railroad from a point on the line of the Mexican (Vera Cruz) Railway, between the stations of Guadalajara and Apizaco, to the Iron Works to be established in the municipality of Zacatlan (Puebla), passing by the towns of Chignahuapan and Zacatlan. The line may be continued to strike the Interoceanic Railway.

III.

COMMERCIAL INFORMATION.

FINANCES AND COMMERCE OF CHILE.

The report of Mr. Lewis Joel, British Consul-General at Valparaiso, Chile, giving an account of the trade and commerce in that consular district, has been published. In his introductory observations, Mr. Joel says :

The civil war which was inaugurated on January 7, 1891, and terminated with the battle of the Heights of Valparaiso, on August 28, 1891, and the subsequent abdication of the Dictator Balmaceda, placed the entire country under the jurisdiction of the victorious constitutional party. The establishment of the new regime was looked upon by the mercantile community as an augury of coming prosperity, and a largely augmented trade, in the near future, was considered assured. Large orders for merchandise of all kinds were consequently sent to Europe, and the first ten months of the year saw the fulfillment of these expectations. Then, a reaction set in, brought about by an overstocked market, in consequence of the continued ordering of merchandise from Europe after the wants of the market had been supplied. The depreciation of the paper currency, and the violent fluctuations in exchange on Europe, were no doubt contributory causes to the decline in trade during the last two months of 1892.

The purchase power of the paper dollar in payment of bills of exchange on Europe was, in January, 1891, 2s. During the civil war, it fell, at one time, as low as 1s. 3d., but at the termination of the war, it stood at 1s. 4½d. Then, a better feeling prevailed, and from then to the end of the year, the value fluctuated between 1s.

6d. and 1s. 8d. The value of the dollar at the commencement of the year 1892 was 1s. 7½d., and at the close of the year, after serious fluctuations, it was quoted at 1s. 5d.

The Government which had recently acceded to power had to encounter the great difficulty of the payment of the cost of the civil war. The expenditure of the Government of Balmaceda, on account of the war, was about \$72,000,000, and that of the Constitutional Party about \$30,000,000. The total sum had to be provided for.

The financial policy of the Government of President Montt, continues Mr. Joel, is to resume specie payments on July 1st, 1896, by the coinage of gold and silver coin of the value of 2s. to the dollar. English and Australian sovereigns to pass current as ten such dollars. The date given above for the redemption of the paper currency may be anticipated by six months, if the average rate of exchange during the previous six months shall not have been below 1s. 10d. to the dollar. This contingency is extremely problematical, as the value of the paper dollar has continued to decline since the publication of this law.

If holders of paper currency, at the date of this proposed resumption of specie payments, decline to convert their paper currency at that rate, they will, by waiting till December 31st, 1899, be entitled to convert at the equivalent value of the silver dollars of twenty-five grams, nine-tenths fine, identical with the silver dollar in circulation when the original issue of the paper dollar was made, which, at that time, had a value of 3s. 2d., but the serious decline in the value of silver since then would render doubtful the value of the silver dollar on December 31, 1899, so that it is very probable that the holders of paper currency will elect to convert on the gold base of 2s. to the dollar, rather than wait till December, 1899, for a doubtful increase in the value of the paper dollar at that date. From January 1, 1897, the paper currency will cease to be a legal tender.

Mr. Joel gives the following summary of Chilean commerce :

IMPORTS.

Valparaiso is the commercial centre from which a large portion of the merchandise imported is distributed to the ports on the coast and the towns in the interior. The principal British imports are : printed, white, and unbleached cotton goods, woollen manufactures, carpets, hardware, rails and railroad iron, coal, bags for grain and minerals, candles, tea, boots and shoes, beer, spirits, etc. The total value of the imports of the Republic for the year 1892 was £12,350,491, as compared with £10,083,416 in 1891, and with £10,749,106 in 1890.

The imports at the port of Valparaiso during 1892 were of the value of £8,474,855 as compared with £6,477,960 in 1891, and £7,412,327 in 1890.

In consequence of the custom-house statistics, in detail, not having been published, Mr. Joel was unable to give a statement of the quantities and values of each particular article, except as regards coal, for which a tabulated statement is annexed to his report.

EXPORTS.

The total value of the exports from all ports in the Republic in 1892 was £10,165,797, as compared with £10,402,786 in 1891, and £10,828,635 in 1890. These figures show that there was an excess of imports over exports in 1892 to the amount of £2,245,694 as compared with an excess of £319,370 in 1891 and of £79,529 in 1890.

The cultivation and export of cereals, especially wheat, in the southern part of Chile, is a most important and increasing industry. Comparatively large as the production is at present, in view of the area eligible for cultivation, it could be considerably increased by the use of modern agricultural machinery and appliances. Talcahuano is the principal port of shipment, and, except in winter, when northers prevail, which is unfortunately the wheat shipping season, it is an excellent and safe port of embarkation. The quantity of wheat exported in 1890, according to official figures, was

28,521 tons of the value of £185,386; in 1891, the quantity had increased to 175,244 tons of the value of £1,216,738, but it declined to 143,506 tons of the value of £858,036 in 1892. The decreased export in 1892, as compared with the preceding year, was not caused by a lesser area under cultivation, nor by a lesser yield, but was consequent on the unfavorable weather at harvest time, which rendered much of the grain unfit for shipment.

The increase in the quantity of barley exported is in about the same ratio as wheat for the years under review. In 1890, it was 5,961 tons of the value of £35,769, and this rose to 13,364 tons of the value of £65,383 in 1891, and, in 1892, it was 12,944 tons of the value of £72,670. The barley produced is almost exclusively shipped to ports in Atacama and Tarapaca, where it is used as fodder for animals in the mining and nitrate districts. It is only when there is an unmanageable excess in the production of this cereal that it is exported to Europe, although there is always a small quantity of the variety called Chevalier barley shipped to Great Britain, which is used by maltsters.

"Although," says Mr. Joel, "the year 1892 closed, as I have before stated, with a marked depression in trade, I believe that this depression is temporary, and that when the overstocked market is relieved, trade will improve. The country is sound and its resources are great, but the effects of the Civil War are still seriously felt by the mercantile community."

CUSTOMS CHANGES IN MEXICO.

The Bureau of the American Republics is informed of certain modifications in the customs tariff of Mexico. According to Article 7 of the Customs Tariff Law, the custom-houses have been turning over every month, to the municipalities of the towns where they are situated, $1\frac{1}{4}$ per cent. of the import duties collected by them. The Government has now issued a law requiring importers, on and after January 1st, 1894, to pay by way of municipal duty, $1\frac{1}{4}$ per cent. on, and in addition to, the regular import duties. This is equivalent

to an augmentation of the present import duties by $1\frac{1}{4}$ per cent. In the Free Zone, the municipal duty of $1\frac{1}{4}$ per cent. is to be estimated and collected on the full amount of import duties and not on the ten per cent. of said duties payable on goods introduced for consumption in said Zone.

The Secretary of the Treasury of Mexico has sent to Congress a bill abolishing the reduction of 2, 4 and 8 per cent. of the regular import duties on merchandise imported in Mexican vessels. These reductions were enacted in December, 1883, to encourage the growth of a national merchant marine. It is stated that they failed entirely to bring about the desired result, and tended to produce retaliatory measures on the part of foreign governments. The Secretary of the Treasury says the Executive is studying other means to encourage the foreign commerce of the country and the creation of a merchant marine.

The President of Mexico has issued a decree modifying Section III, of Article 78 of the Tariff Law, which authorized Mexican consuls abroad to charge four dollars for the certification of each set of consular invoices.

After January 1st, 1894, this fee is to be payable according to the following scale—

If the declared value does not exceed \$100	\$1
If it exceeds \$100 but not \$1,000.....	4
For each additional \$500 or fraction of that sum.....	1

Consuls are instructed to exact an oath from shippers, as to the correctness of invoice values declared by them.

The Secretary of the Treasury of Mexico has sent to Congress a bill unifying a tax on the exportation of construction and cabinet woods, and creating a tax on the exportation of dye woods. The former tax is to be \$1.50 per cubic meter of the ship's carrying capacity, or if the ship does not leave port fully loaded, \$1.50 per cubic meter of timber shipped. The export tax on dye woods is to be \$1 per cubic meter.

The President of Mexico has signed the new bill passed by Congress, taxing the domestic production of yarns and cotton goods

woven by machinery not moved by hand power, and it will go into effect January 1, 1894. The tax will be paid by the purchasers at first hand, and the minimum amount which it must produce each year is \$800,000. This is 5 per cent. on \$16,000,000, the assumed amount of the total sales at wholesale by the factories annually. The purchasers must furnish the special stamps that will be used in each transaction. A commission will be appointed to determine the quota to be assigned against each factory in the republic, and the first assessment will be made this month for January and February payments. Every two months the amount of stamps used at each factory will be figured up, and if the factory has not purchased its quota for that period, it must immediately proceed so to do.

CUSTOMS CHANGES IN COSTA RICA.

The following changes in the tariff of Costa Rica, relating to wines, spirits, etc., are announced :

Brandy, whisky, Geneva and other liquors of which the import is legal in barrels, which formerly paid eighty cents per kilog., now pay one dollar and five cents per kilog. ; the same in any other form of package which formerly paid sixty cents per kilog., now pay eighty cents.

Liquors in barrels or demijohns, former duty sixty cents per kilog. ; present duty one dollar and five cents per kilog. ; the same in any other package, former duty forty-five cents per kilog. ; present duty eighty cents per kilog.

Champagne in any form of package, former duty ninety cents per kilog. ; present duty, one dollar and five cents per kilog.

EXPORT DUTIES, ARGENTINE REPUBLIC.

The export duties of the Argentine Republic, for 1894, have been based upon the following schedule prepared by the Permanent Committee of Valuation. The values are in gold, and the quantities per 100 kilogs (220.46 pounds) unless otherwise stated :

Oil, fish, \$8 ; oil, bones, \$12 ; horns, cattle, 1,000 kilos, \$60 ; horns, sheep, 1,000 kilos, \$10 ; meat, salted and jerked, \$9 ; bone-ash, 1,000 kilos, \$16 ; hair, \$38 ; hides, calves', salted, \$12 ; hides, calves', dry, \$27 ; hides, sheep and lamb, \$20 ; hides, sheep, salted, \$18 ; hides, deer, \$35 ; hides, goat, \$60 ; hides, kid, \$160 ; hides, carpincho, \$56 ; hides, nutria or hare, \$120 ; hides, vicuña, \$200 ; hides, ostrich, \$100 ; hides, chinchilla, \$400 ; hide trimmings, horned cattle and sheep, \$2.50 ; oil, horse, \$12 ; bones, 1,000 kilos, \$12 ; wool, \$23 ; tongues, \$20 ; ostrich feathers, \$120 ; ostrich stomach, peptona, per kilo, 80 cents ; tallow, melted down, \$1.2 ; tallow, raw, \$8.

PRODUCTS OF THE ISLAND OF CUBA.

According to statements lately compiled and published by the Chamber of Commerce of Havana, the public wealth in the Island of Cuba may be estimated on an average and in round numbers, as follows :

There are on the island 90,960 sugar and tobacco plantations, and cattle breeding and fruit and vegetable growing farms, whose total value is estimated at \$325,000,000, and whose yearly production is worth about \$100,000,000. The number of cattle aggregates 3,730,858, belonging to the following classes : Horses, 531,416 ; mules, 431,309 ; asses, 1,869 ; cows, bulls and oxen, 2,485,766 ; goats, 9,830 ; hogs, 570,194 ; sheep, 78,493.

YEARLY EXPORTS.

Sugar, molasses, coffee, green fruits and other vegetable products	\$85,000,000
Cattle	1,000,000
Mineral ores	3,500,000
Sundries	500,000
	<hr/>
	\$90,000,000

YEARLY IMPORTS.

From the United States.....	\$16,250,000
“ England.....	13,000,000
“ Spain.....	10,500,000
“ France.....	2,250,000
“ Belgium.....	1,000,000
“ Germany.....	750,000
	<hr/>
	\$43,750,000
	<hr/>
Excess of exports.....	\$46,250,000

MISCELLANEOUS.

The principal export firms in Buenos Aires, in connection with the soladero owners in the Republic of Uruguay, have made an arrangement whereby all sales and purchases are to be made upon the metric-decimal system, to come into force from November 1st, 1893, in the following form :

1. All salt hides, tallow, grease, and jerked beef will be sold per 100 kilos ; bone-ash and bones per 1,000 kilos, and horns per 1,000.
2. Allowance in weight for salt hides, which has formerly been in existence, has been cancelled.
3. The allowance in weight for hides has been fixed at two kilos.

The Government of Chile has resolved to promote the establishment of a national line of steamers between Chile and Europe, calling at the river Plate and Brazilian ports. With this object in view, it is calling for proposals for a mail service in Chilean steamers owned by a Chilean company, with a capital of not less than \$4,000,000. The service is to be monthly, outwards and inwards, and is to be performed by six steamers of not less than 4,000 tons each, and of a speed not less than fifteen miles per hour. The contract will be for five years, subject to the approval of Congress.

A company has been organized, under the name of the West Indies Chemical Works, Limited, for preparing dyes from vegetable substances found on the Island of Jamaica. Patents have been obtained for a new dye from cashaw, which grows in abundance on

the south side of the Island. For the present, however, the company will confine itself to logwood. Other efforts for developing industries in Jamaica are reported. Experiments with sisal hemp are being made in certain localities. Better methods of handling cacao and coffee, and further development of the manufacture of preserves and of the bee industry, are urged.

The cultivation of the cocoa-nut palm on the Isthmus of Tehuantepec and in the State of Chiapas, Mexico, is receiving a strong impulse from the establishment of agencies there for the purchase of cocoa-nuts for the American market.

The first agricultural show ever held in Mexico took place at the village of Coyoacan, near the city of Mexico, on the last three days of October. The display of thoroughbred cattle is taken as gratifying evidence of the interest felt by Mexican agriculturists in introducing improved breeds. It is hoped that the show will be the forerunner of many others.

The importers of agricultural machinery for the coming harvest in Argentina appear to be preparing for an extraordinary demand. Some of the largest importers had, it seems, just returned from the United States and England, and consignments of reapers and threshers were following them in great number. The Finance Minister was, in consequence, being deluged with applications for their admission free of duty. This concession had, within a period of only two days, been granted on more than 600 machines.

A syndicate has petitioned the government of the Argentine Republic to permit it to construct a commercial dock at Bahia Blanca, which would give access to the largest vessels, and would be fitted up with the latest appliances for loading and unloading. The site for the proposed dock is Puerto Belgrano, at the entry to the Atlantic Ocean, where there is a depth of from 32.9 to 65.6 feet, and where, it is claimed, sand banks cannot form. The cost of the work is estimated at \$4,000,000. Bahia Blanca is fast becoming an important port of export.

The owners of onyx quarries in the State of Oaxaca, Mexico, are discussing the forming of a syndicate backed by a New York firm for developing their properties.

Information has been received of a trial shipment of a car load of Mexican sugar on the 3d of November from Monterey to St. Louis, Mo., via Tampico and New York. If satisfactory results are obtained, heavy consignments will follow. This season's surplus sugar crop tributary to the Mexican and Monterey Gulf Railroad is estimated at 30,000,000 pounds.

The growth of the Bolivian city, Sucre, has been seriously impeded by the want of an abundant and constant supply of water; but this obstacle has at last been removed by the completion of an aqueduct more than sixteen miles in length. This aqueduct has eight tunnels, the longest of which is 1,456 yards in length, and seven bridges. It is the work of a French engineer, and the pipes used in its construction were imported from France.

The Chamber of Deputies of Peru have approved several clauses of the monetary project. The export duty on silver bars has been abolished, and duties are now payable twenty-five per cent. in gold. After April 1, only Peruvian silver coin will be legal tender throughout the Republic. It is also announced that the Senate has authorized the Government to issue a loan of 1,000,000 silver soles, guaranteed by the excise duties, the tax on opium, and 40,000 tons of guano from the islands of Chincha. The port authorities call attention to a great decrease in the depth of water in ports on the coast, probably owing, it is thought, to a volcanic upheaval.

Matters are looking better in Venezuela and the country is settling down to a tranquil development of its great natural resources. During the past year, the Treasury receipts show an increase of quite 45 per cent., and this is attributable in a very large measure to augmented trade.

By law of May 29th, 1893, the Mexican Government was authorized to contract abroad a loan of £2,500,000 for the purpose of enabling it to pay off a certain portion of the floating debt, to recover control of the mints, etc. Congress has now increased the

authorization by £500,000, making £3,000,000 in all, and whereas the former law stipulated that the new loan should not be contracted on less favorable terms than the issues of 1888 and 1890, the Government is now authorized to accept the most advantageous offer that may be made. The proceeds of the loan are to be applied to indemnifying the lessees of the mints for the termination of their contracts and to completing the Tehuantepec Railway.

The Government of Salvador is proceeding with the work of placing its currency on a gold basis. As announced in a bulletin of the Bureau of the American Republics issued May 22, 1893, a decree was promulgated for the payment of customs duties in gold, U. S. gold coin being given the preference by a premium of 4 per cent. as against 1 per cent. premium for British, Spanish and Mexican coins. French coins, and those of every nation of the Latin-American Union, are taken at par, and German coins at one per cent. discount. The decree made the process of converting the customs payments into gold a gradual one, but it is expected that very soon the entire customs revenue will be collected in that metal.

By a convention signed at Bogotá, May 30, 1892, and promulgated by the President of France, on the 25th of October, 1893, the Republics of Colombia and France guarantee to each other all the right of commerce, navigation, transit and tariff that are granted by each to the most favored nation. It is provided in the treaty that its terms shall remain in force until the expiration of one year from a declaration by either party of the intention to withdraw.

Advices from Buenos Aires state that a representative of a strong syndicate in Havana has arrived in that city with a view to acquiring a large tract of land in Misiones, Argentine Republic, for the cultivation of tobacco. The capital of the syndicate is stated to be \$1,000,000 gold.

A new process for extracting gold is about to be applied to the gold fields of Chile, it being claimed that there are still large quantities of gold which may be easily recovered from almost numberless old fields that have been ineffectively worked.

FINANCES OF CHILE.

No. 66.]

LEGATION OF THE UNITED STATES,
SANTIAGO, *December 19, 1893.*HON. W. Q. GRESHAM,
Secretary of State.

SIR: I inclose for the use of the Bureau of American Republics a translation by the Chilean Times of a communication of the Chilean Minister of Finance, Mr. Alejandro Vial, to the Chilean Minister in France, reporting the present financial condition of the republic. I send also for the same use a copy of the decree of sale of certain nitrate properties; also a table showing the receipts from customs for the month of November past, and another showing the present condition of the conversion fund provided for the redemption of certain paper currency issued by the Government. I have, etc.,

JAS. D. PORTER. *

[The Chilean Times—Valparaiso.]

THE FINANCIAL SITUATION.

Important Communication of the Minister of Finance to the
Chilian Minister in France.

No. 1160.]

SANTIAGO, *November 30, 1893.*

Some London papers have lately published divers articles on Chile, doubtless intended to damage the credit of this country.

In the articles in question, the Government also has been attacked because it has granted concessions for the construction of new railways in the Province of Tarapaca, and hostility towards the foreign element has been attributed to this measure.

I have no desire in this communication to refute the said articles, because that has already been done by the Legation in a manner that

* United States Minister to Chile.

will carry to people interested in our affairs the conviction that on the part of Chile there has not existed, nor can there exist, any hostility against foreigners, and that they enjoy in every way the same and even greater privileges than the natives.

We are surprised at the persistent crusade which is carried on in England against the credit of Chile which has ever fulfilled its obligations even in times of difficulty and danger, postponing, for this purpose, urgent necessities of the Government, and that this crusade, which is as unjust as unwarrantable, should have been inaugurated at a time when the finances of the country are in a flourishing condition.

This clearly demonstrates that the interests it is sought to defend are not the general interests of trade or of the foreign capital invested in our country, which, within its territory, enjoy the same privileges and immunities as those of the natives, or those that they may have enjoyed in their own country.

On this occasion, I desire solely to lay before you certain antecedents which will enable you to form a correct idea with respect to the public finances, in order that you may be able to rectify statements and remove the impression that may have been produced by articles which do not bear the stamp of truth.

* * * * * * *

The estimated expenditure for the current year was \$48,000,000 in current money, and £762,134 sterling, which, added to supplementary grants and special laws passed subsequently to the promulgation of the estimates, give a total authorized expenditure for the current year of \$51,800,000 in legal-tender currency, and of 1,048,000 in pounds sterling.

From these amounts there may be deducted with all confidence the portion of the estimates which will not be expended during the current year, and which may be estimated at \$1,000,000 in legal-tender currency, and at £25,000 sterling so that the total expenditure for the year will not exceed \$50,800,000 in legal-tender currency, and a little more than £1,000,000 sterling.

The revenue was calculated, taking into consideration the balances in hand in the treasuries in January, 1893, which amounted to \$2,000,000, at \$60,793,000 in legal-tender currency and £1,041,000 sterling.

At the beginning of the year, the accounts current in the banks showed a balance against the Government of \$4,200,000.

Out of the ordinary revenue, all the public services have been attended to and the debt owing to the banks has been cancelled.

Consequently, the total expenditure for the year will amount, approximately, to \$55,000,000.

To meet the expenditure of \$55,000,000, and of £1,000,000 sterling a revenue of \$63,300,000 in legal-tender currency and \$1,041,000 sterling is counted upon him.

To prove the correctness of these calculations, I will proceed to show you the state of the national finances at the middle of the current month:

On that date there existed in the treasuries the sum of.....	\$2,900,000
Import duties will yield to the end of the current month	500,000
Import duties will yield to the end of December	2,000,000
Export duties to the end of the current month	1,200,000
Export duties to the end of December.....	3,600,000

Total to the end of the year	10,200,000
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The expenditure to the end of December may be safely calculated as follows:

Salaries of public employes in November and December.....	\$2,400,000
Other government expenses.....	2,500,000

Or a total expenditure of.....	4,900,000
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Which amount, deducted from the \$10,200,000, leaves a surplus of \$5,300,000.

With respect to revenue and expenditure in gold, you are aware that with the remittance of £60,049 sterling sent to the Legation on October 21 last, the amount to be paid in gold by the Legation may be considered to be provided for.

Since the remittance of October 21, the following sums have been remitted to you:

Per steamer of November 4.....	£43,851
Per steamer of November 17.....	33,651
And by this mail.....	64,914

Total.....	142,416
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Which, added to the export duties in December, and which are calculated at upwards of.....	100,000
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Makes a total of.....	242,416
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which is intended to form part of the fund that the Legation will require for the public service abroad during the first half of 1894.

Outside of the amounts already mentioned, the import duties, payable in gold, and which are destined for the conversion of our paper money, have produced up to date the sum of £267,870 1s. od., and considering that these duties will amount in December to £60,000 sterling, we have for the Conversion Fund a sum not less than £327,870 sterling.

This amount has naturally to be added to the surplus in hand on December 31.

* * * * *

The estimates for 1894, presented to Congress in June last, amounted to the sum of \$49,754,000, and £1,427,00 sterling.

These amounts have been modified, firstly, by the Joint Budget Committee and, secondly, by the Senate. The total amount agreed upon by the Senate, and now being discussed in the Chamber of Deputies, is the sum of \$55,304,000, and £868,000 sterling.

You will see from this, that the estimated expenditure in current money, has been augmented by \$5,550,000.

This increased expenditure is due to sundry public works which it is necessary to carry out, or to inaugurate next year, and which will contribute to the development of our trade and to the increase of the public wealth.

Among them, there figures the proposed dock for the port of Iquique and a breakwater for Talcahuano, which will greatly facilitate the landing of foreign goods and the shipment of home produce.

You will please bear in mind that the estimates of the Ministry of Public Works amount, approximately, to \$19,000,000, and that in them there figure large sums for railways in construction and for the purchase of rolling-stock and materials adequate for the requirements of the transportation of all the freight which from day to day increases in proportion to the development of our industries.

The diminution in the estimates in gold is due to the suppression by Congress of the item inserted for the formation of the Conversion Fund in consequence, in the first place, of its not being considered expenditure, and in the second, because it has been thought that by inserting in the estimates an item for the Conversion Fund, it might give cause abroad for the belief that conversion could not be effected if at any time Congress should refuse to sanction the item.

As a special act provides that the amounts mentioned in it shall be devoted to the conversion of the paper money on a certain fixed date, it was quite unnecessary to insert any sum in the estimates, inasmuch as it was not to be expended in the year.

For these reasons, the item in question was expunged from the estimates, and these appear so much the less by this sum.

To defray the expenditure in 1894 the country counts upon the following resources:

	Paper Money.	Gold.
Surplus on January 1, 1894	\$5,300,000	.....
Fifty per cent of the import duties, calculated at \$12,- 000,000.	6,300,000	\$470,000
Surcharge of 35 per cent on the \$6,000,000.....	2,100,000	.....
Twenty-five per cent of import duties, payable in legal tender currency	3,000,000	.....
Surcharge of 137.71 per cent upon the preceding amount in conformity with the prescriptions of arti- cle 5 of the act of May 31 last.....	4,131,537	.....
Storage	120,000	.....
Surcharge on storage.....	42,000	.....
Export duties on nitrate and iodine, the exportation being calculated at 22,000,000 Spanish quintals, on which duties are payable in current money at an average rate for the year of 16 pence exchange.	25,087,210	871,662
Wharfage.....	40,000	.....
Confiscations and fines.....	25,000	.....
Railways.....	15,000,000	.....
Stamps	800,000	.....
Postoffice and telegraphs	850,000	.....
Agricultural tax.....	201,062	.....
Rentals of properties.....	40,000	.....
Redemption of censos	250,000	.....
Other branches of revenue.....	500,000	.....
Sales of public lands and instalments from previous sales	2,500,000	.....
Total	66,286,809	1,341,662

From the preceding data you will observe the considerable diminution which has been calculated in imports. These will amount in the current year to \$15,000,000, and for next year they are estimated at \$12,000,000 only, taking into consideration that the surcharge which will be recoverable on custom-house duties next year will bring about a diminution in the importation of foreign goods and will limit our consumption.

The exportation of nitrate in 1894 is calculated at 22,000,000 Spanish quintals.

As you will readily comprehend, this calculation, far from being exaggerated, is probably under the mark.

For instance, it must be borne in mind that from March 31, 1894, the production will be free, and each producer will produce as much as he can; that from the same date, the Lagunas Works, with a capacity of production equal to 10,000 quintals daily, will commence operations, as will also other works belonging to Sloman & Dohn and Folsch & Martin; that many of the Government properties to be sold will be in a position to produce shortly after the sale, especially those which are situated alongside works actually in operation, or those possessing machinery which with little trouble can be put in running order, and finally that the production in the current year will not be under 21,000,000 quintals, which production has been very limited, and has caused a considerable diminution in the stocks of nitrate in Europe.

In view of these circumstances, I repeat that the calculations formed by the government of the revenue in 1894 are very moderate, and it may be safely asserted that the reality will exceed the calculations.

We count, therefore, with a revenue of \$66,286,809 and £871,622 sterling to cover an expenditure in the year amounting to \$55,304,000 in current money and £868,000 sterling, which will leave a surplus of \$10,982,000 and £3,600 sterling.

This is without counting the £470,000 sterling destined for the conversion of the paper money.

The preceding statement will show you the true situation of the national finances, and the data contained in it will enable you to comprehend that it is as satisfactory as could be desired, and that the country is in a position to fulfill the obligation it has contracted to redeem the paper money on June 30, 1896.

For this purpose, it counts upon more than sufficient resources, and with the fixed determination to fulfill the pledge it has solemnly given.

God guard you.

ALEJANDRO VIAL.

To SENOR DON AUGUSTO MATTE,

Envoy Extraordinary and Minister Plenipotentiary

of the Republic in France.

SALE OF GOVERNMENT NITRATE PROPERTIES.**Decree of Sale.**

SANTIAGO, *November 30, 1893.*

By virtue of the powers invested in me by clauses 1 and 2 of the act of the 29th of the current month,

I hereby decree:

1. On June 15, 1894, and following days, at 12 o'clock noon of the day, there shall be sold in Santiago, by public auction, in the presence of the Junta de Almoneda, the following nitrate works and nitrate grounds in Tarapaca:

Nitrate Works.

1. Victoria.
2. Palacio Industrial.
3. California.
4. Encarnacion.
5. Paradas de Negreiros and adjacent grounds.
6. Germania and adjacent grounds.
7. Abra de Ugarte.
8. Valparaiso and adjacent grounds.

Nitrate Grounds.

1. Cerro de Campaña.
2. Cerro de Pitoguyac.
3. Cerro de San Bartolo.
4. Re balon and San Roman.
5. Incurables and Libertad.
6. Paradas de Loayza.
7. Grounds behind Abra de Quiroga.
8. Cerro de Trinidad.
9. Ground between Primitiva and Tres Marias
10. Puntilla de Tres Marias.
11. Tia Caricia and Agustina Flores.
2. The minimum price of sale will be that fixed by the Valuing Commission appointed in the decree of March 10, of the current year.
3. Intending bidders must previously to the sale give security equal to 40 per cent of the valuation of the works or grounds they

may desire to purchase. The soundness of the security will be decided upon by the Director of the Treasury.

4. This security will be cancelled within the five days next following after the sale to such bidders as may not have purchased.

5. Bidders who may have purchased properties must pay 20 per cent of the purchase money within ten days after the sale, and the security will remain in force in the form prescribed in clause 6, of the act of the 29th instant.

If payment should not be made in the time specified, the sale will become void, and the purchaser shall pay to the Treasury a fine of 20 per cent of the purchase money. This fine will be deducted from the security given in conformity with clause 3.

6. The remainder of the purchase money will be payable at the time specified in clause 5, of the aforesaid act of the 29th instant.

7. The Director of the Treasury will sign the deeds of sale in which there shall be inserted the present decree and clauses 5, 6, 7, 8, and 9, of the act of the 29th instant.

8. The properties, buildings, plant, and fixtures will remain mortgaged to the Government until the whole of the purchase money shall have been paid.

Let it be noted, communicated, and published in the form and for the time prescribed in clause 3, of the act of the 29th instant.

ALEJANDRO VIAL.

JORJE MONTT.

CUSTOMS REVENUE.

The customs revenue in November amounted to \$4,732,561.04 in legal-tender currency, and to \$1,453,199.39 in gold, as under:

Ports.	Paper.	Gold.
Arica	\$54,162 73	\$19,812 08
Pisagua	832,894 35	263,219 02
Iquique	2,162,863 58	672,411 73
Tocopilla	171,016 39	51,290 58
Taltal	122,514 08	34,423 40
Antofagasta	210,929 76	66,281 44
Caldera	2,602,64	1,018 54
Coquimbo	20,589 71	4,778 90
Valparaiso	924,280 00	276,614 00
Talcahuano	208,174 46	55,851 48
Coronel	13,250 92	5,299 29
Valdivia	8,887 31	2,058 97
Puerto Montt	431 11	140 00
Total	4,732,561 04	1,453,199 39

CONVERSION FUND.

The reserve fund for the redemption of the paper money amounted, on December 5, to \$7,246,380.75, as under:

Metallic reserve—Value in silver dollars, in conformity with the act of November 26, 1892.....	\$4,319,226 15
Gold, of 24 pence, received direct in specie.....	248,654 10
Value of bills matured in Europe and sent to Chile, in specie.....	200,000 00
Value of bills received for import duties and storage in the hands of the legation in France, and in transit to recover and remit to Chile, calculated at 24 pence.....	2,478,500 50
	<hr/>
	7,246,380 75

II.

RECENT COMMERCE OF BRAZIL.

When the naval revolt broke out at Rio de Janeiro on the 6th of September, 1893, fears were entertained that the commerce of that port would suffer greatly, and that the commercial interests of foreigners would be seriously jeopardized. These fears have been only partially realized. With the view of minimizing the damage to their several interests in the Brazilian capital, the leading maritime nations made haste to increase their naval forces in the bay, and an arrangement, made through the intervention of their commanders, between the Government of President Peixoto and the revolted Admiral, no doubt prevented a full realization of the apprehensions alluded to.

Some difficulties have been experienced and some danger has been incurred in the landing of cargoes in lighters from the vessels of different nationalities, and, in a few cases, the active intervention of the foreign naval commanders has been necessary to protect the property of subjects of their respective Governments from seizure by the insurgents; but such intervention has always been effective.

The commerce of the port of Rio de Janeiro, as well as that of the other leading ports of the country, had considerably increased at the time of the revolt over that of a corresponding period of the year 1892, as is shown by a comparison of the customs receipts for the month of August of the years 1892 and 1893, the month of the latter year next preceding that in which the revolt broke out. Referring to official publications of the Brazilian Government, we find that 9,938,291 milreis were collected in the custom-house of Rio de Janeiro for the said month in 1893, against 7,841,422 for the same month in 1892.

It is true that not all this apparent difference is real, for the value of the milreis in the former year was about 14 pence against about 11 pence in 1893.

The immediate effects of the revolt on the commerce of the above port may be shown as follows: The customs receipts for September,

1893, according to the same authority, fell off from the previous month to 5,715,930, being a decrease of 4,222,361, or about 42 per cent. The value of the milreis, which is always determined by the rate of exchange on London, was very little affected, being about 11¼ pence for August and 10½ pence for September; at which latter rate it has remained during the remaining months of the past year. The decline in exchange, however, since the autumn of 1892, has been considerable, having fallen off from about 14 pence in 1892 to about 10½ in 1893. This difference in the value of the milreis should be taken into account in estimating the difference between the foreign commerce of Rio de Janeiro since the outbreak of the revolt, and that of the corresponding months of 1892, as shown by the following table:

Customs receipts at the Rio de Janeiro Custom-house :

	1892.	1893.	DECREASE.
September.....	6,876,332 milreis.....	5,715,930 milreis.....	17 per cent
October.....	6,440,191 milreis.....	6,121,976 milreis.....	5 per cent
November.....	7,104,729 milreis.....	6,928,829 milreis.....	2½ per cent

Although since the outbreak of the naval revolt, the commerce of the port of Rio de Janeiro has been affected to the extent above indicated, that of the other ports of the Republic, as shown by official reports, has sensibly increased. This fact, which shows that the revenues of the country have suffered little or no diminution in consequence of the disturbances at the capital, accounts for the slight decline in foreign exchange, and in the value of Brazilian securities held in Europe.

AMERICAN TRADE IN PERNAMBUCO.*

It is very important for houses desiring to secure trade in this port of Brazil to send good, reliable men to represent them—men who understand the language and who can find out from the parties here every detail regarding packing, shipping, size of bale, bundle, box, bag, cask, etc. The commercial traveler should ascertain all this and forward the order for the goods and give details as to their preparation for shipment. Then every particular given by the agent

* From Advance Sheets of United States Consular Reports, February, 1894.

or traveler should be carried out to the letter by the manufacturer or firm putting up and shipping the goods.

The commercial traveler coming to this country should be well paid. The house that wants to secure a good trade in its line will see to it that its representative is well paid.

Manufacturers of dry goods, such as prints, gingham, cotton goods of all kinds, twills, plaids, light material for trousers, counterpanes for beds, striped hickory, etc., should bear in mind that medium-class goods are chiefly used in this city, as in all the principal cities of the province, with much of the best class of goods also, while in the interior inferior goods are used. For this reason, as well as other reasons, the importer who orders for city and for country trade wants the goods sent as ordered. Will our American manufacturers cater to this dry goods trade, which is very large?

The English manufacturer, for instance, will supply thirty pieces of prints of different shades, but of the same pattern, which would be some 1,200 yards of from forty to fifty-five yards in a piece, while American manufacturers will not take an order for less than 100 pieces, showing they do not want this trade, unless on certain conditions which they themselves prescribe. Our manufacturers refuse to print goods from twenty-two to twenty-seven inches wide and from forty to forty-five yards in a piece, while the Brazilian importer knows that his customer in the interior of the State will not be satisfied with goods of any other width or with a greater or less number of yards in a piece.

It is immaterial what reason they may have for wanting these goods thus and so. If our manufacturers want this trade, they must conform to the prevailing methods or convince the people of the interior of Brazil that a different width and a greater number of yards in a piece would serve their purpose better. I understand the English manufacturer will print goods as desired. Will our manufacturers print goods with a weight of one pound in from two and one-half to seven yards, and from six and one-half to thirteen and one-half inches wide, as one or two or a dozen importers may desire, and rolled round or put up flat, as other importers may wish? The English manufacturer prints to order.

So far as cotton goods of all kinds are concerned, we should control the bulk of the trade, and if the young commercial travelers who

came here some time since representing forty-seven mills, manufacturing all kinds of cotton goods, will deal honestly and squarely by the importers, and if the manufacturers will place their goods upon this market satisfied with a reasonable profit, there is no doubt but that those forty-seven mills, located, I believe, principally in the Southern States, will secure a very large share of the trade in their line.

DAVID N. BURKE, *Consul*.

PERNAMBUCO, *November 7, 1893.*

III.

TARIFF CHANGES IN BRAZIL.

The following modifications of the Brazilian tariff have been made since the translation published by the Bureau of the American Republics in July, 1891 (Bulletin 8, Import Duties of Brazil), by a law passed by the Brazilian Congress in December, 1891, and reaffirmed in September, 1893. These modifications will be in force for the year 1894.

The surtaxes mentioned below are to be understood as increases on the rates given in the tariff as published by the Bureau in 1891.

Modifications of the Customs Tariff of Brazil for the Year 1894.

I.—Importations.

The surtaxes on the import duties on articles of consumption, stipulated in law No. 25, of December 30, 1891, and in the legal dispositions alluded to in said law, are maintained.

The duty on matches has been trebled, and the duties on smoking tobacco and kitchen salt have been doubled.

A surtax of 30 per cent shall, as heretofore, be levied on the following articles:

Frog braid (*alamares*).

Carpets (*alcatifas*).

Barege.

Gregas (edgings).

Trimmings, various.

Galloons.

Garters.

Blankets and covers.

Mantlets.

Chemisettes.

Shirts.

Tulle.

Gauze.

Bows.

Plush.

Velvets.

Rugs (*tapetes*).

Articles composed wholly or in part of mother-of-pearl, tortoise shell, coral, gold, silver, platinum, or precious stones.

Mirrors.

Lace.
 Nets.
 Wearing apparel, made up.
 Stockings, of yarn or wool.
 Bands and insertions.
 Window shades.
 Brocades.
Lhamas.
 Shawls.
 Scarfs.
 Veils.
 Furniture of wood.
 All articles of gold or silver, or combined with these metals.
 Perfumery.
 Playing cards.
 Jewelry of all kinds.
 Figures, busts, statues, vases, and other fancy or ornamental articles, of clay, porcelain, glass, copper and its alloys.
 Manufactures of marble, alabaster, porphyry, jasper and similar stones.
 Parisian tacks.
 Harness.
 Carriages.
 Boots and shoes of tissues of silk, or mixed with silk, and Hessians.
 Cheese.
 Hams, prepared in any way.
 Preserves of all kinds, with the exception of products preserved in ice.
 Bologna and other sausages.
 Ribbons of all kinds.
 Tassels.

Frames.
 Mouldings.
 Vases and other articles of porcelain, Nos. 4, 5 and 6.
 Lustres, candelabra, and chandeliers of all kinds.
 Articles of glass, No. 2.
 Fermented beverages.
 Liqueurs.
 Alcoholic liquids and beverages.
 Wine, in bottles.
 Bouillons or jellies.
 All articles included in classes XVIII, XXVII, XXIX, and XXXV.
 Gloves.
 Corsets.
 Cravats.
 Hats and caps of all kinds.
 Tissues of linen, canvas, Brittany, Irish and Rouen cloth, muslin, cambric, *platilha*, and other tissues not specially mentioned, unbleached, bleached, dyed, brown, striped, or printed.
 Cloth, cassimere, and cassinet of wool, mixed or not with silk, single or double, embroidered or not, and similar goods not specially mentioned.
 Damask.
 Alpacas, serges, *serafinas*, striped stuffs, royal, Chinese satin, knitted tissues, crape, woolen velvet, and other similar tissues not elsewhere mentioned, plain, twilled, figured or damasked.

Macaroni shall be subject to the duty levied on biscuits, small cakes and crackers.

The duties on liquids, which are not yet levied on a weight unit, shall, in future, be collected on gross weight, including recipients, with deduction of the tare allowances established in the tariff, the litre being considered as a kilogramme.

Conformably to law 126 A, of November 21, 1892, the clearance dues on articles exempt from consumption duties (with the exception of animals of the bovine,

ovine or porcine race, live or slaughtered, destined for consumption, wheat in the grain, and all other seeds destined for sowing, and the articles named below under the head of "Exemptions") are maintained.

Conformably to the aforesaid law, the surtax on portorage (*capatarzas*) and warehouse dues are likewise maintained.

II.--Additional Dues.

The surtaxes established by law No. 25, of December 30, 1891, on the import duties on articles of consumption are maintained, and the exemptions from the surtax shall likewise include printing paper, books stitched or bound with cardboard or paper covers, cloth, hides or skins.

The additional tax of 10 per cent levied on the fees for clearing goods admitted free of consumption duties, as well as on portorage, warehousing, light and dock dues, is likewise maintained.

III.--Exemptions.

The following articles shall, on importation, be exempt from clearance fees:

Machines and material destined to improve the manufacture of sugar, and for the construction and installation of factories, provided that these articles be directly imported by the cultivators or destined to their use.

The machines and materials in question, which include articles already exempt from duty according to the tariff as well as other dutiable articles, are the following:

1. Iron trusses or frames with accessories such as columns, beams, screws, rivets, sheets of zinc or of galvanized iron for walls and roofs.
2. Complete plant for lighting by electricity or gas.
3. Conduits for pipes and water, gas or steam, with their joints and cocks.
4. Tools of iron, portable lifting-jacks (*talhas*), forges, etc.
5. Machines and transmission apparatus for the manufacture of sugar and for the distillation of brandy and alcohol.
6. Transmission belts, bands of caoutchouc or asbestos, and cordage of cotton and hemp for transmission apparatus.
7. Presses (*trilhos*), portable or fixed, contractors' trollies and wagons for the transportation of earth and products; locomotives, carts, boats and recipients of wood or iron.
8. Fire-bricks for furnaces of steam boilers.
9. Scales for weighing sugar cane and iron tanks for cane juice.

The exemption from duty shall not extend to common building bricks, wood of all kinds; copper nails, generally known as Paris nails, grease for machines and to all articles which the industry of the country produces in a sufficient quantity to meet the requirements of consumption.

The request for exemption must be addressed to the customs inspectors, who shall grant the same on the production of the following documents:

1. A detailed list of the articles, with indication of the kind, quantity, weight or measure.

2. Proof establishing that the machines or material for which free entry is requested are destined to the use for which exemption is granted, that they will be employed for said purpose and that the quantity declared is exactly that absolutely required.

The customs clearance shall be effected by means of a bond or guarantee, in order that the Treasury may, when necessary, recover the duties due, should the machines or their parts as well as the imported materials have been employed for a use other than that for which the free entry was granted. In the latter case, the duties must be collected on all the materials or machines, and the interested party shall no longer be authorized to request other exemptions.

It is to be understood that in cases where the above surtax is levied on articles embraced in the reciprocity agreement between the United States and Brazil, the former country still continues to enjoy the reduction on the *total* amount of the duties guaranteed by said agreement.

IV.

TARIFF CHANGES IN GUATEMALA.

The official paper of Guatemala, *El Guatemalteco*, states that President Barrios has issued a decree in which, after citing the American articles which that government agreed to admit free of duty, he declares that from and after the 19th of October, 1893, certain additional articles are to be admitted into Guatemala free of all customs duties, and of any national or municipal dues, and national port charges. The following changes in the tariff and fiscal arrangements are also made:

From the 15th of October, the fiscal and municipal taxes on cattle were to be that of \$2.50 per head.

From the 12th of October cattle and hogs might be introduced into the Republic free of all taxes.

From the 13th of October, the importation of dried meats, smoked or salted, was to be free of all duties.

The slaughter of sheep and hogs is also free of all fiscal or municipal taxes.

From the 15th of October, the manufacture of flour in the country was to be free of all taxes, whether fiscal, municipal or other. The imported flour was to pay, from the same date, in the Custom House a

duty of \$2 per quintal, gross weight (about 101 pounds). Wheat imported is to pay \$1 per quintal.

From the 1st of January, 1894, the customs of the Republic will charge 25 per cent of the import duties in national gold coin without any alteration during the whole of the year 1894.

From the 14th of October, the tax on each bottle of "aguardiente," purchased at the depots for consumption, was to be 46 cents. Following are the articles to be admitted duty free :

Aerometers.

Galvanized iron wire for telegraph and telephone use.

Wooden school alphabets of all kinds.

Coal-pit tar.

Asbestos, in fibre or plates, in natural state.

Dessicated animals, prepared for cabinets of natural history.

Printed, lithographed or engraved advertisements on paper or cardboard, without frame.

Apparatus for gas lighting.

Electric apparatus, except the chemical substances taxed.

Fire engines and their appurtenances.

Plows, and all separate parts of same.

Argil, sand or molding-sand in natural state.

Rice, in grain.

Barometers.

Paper money.

Iron pumps of all kinds.

Glass globes for electric light.

Boats, fishing-tackle, sails, chains, oars, and all other appurtenances of ships in use in the ports, canals, rivers and lakes of the Republic.

Iron buoys and all apparatus for locating the same.

Pitch, prepared for vessels.

Mineral refuse.

Compasses of all kinds.

Codfish.

Wire or steel cable, of all thicknesses.

Coal, charcoal and animal charcoal, except in powder.

Catalogues, of all kinds, unbound.

Geographical, topographical and nautical maps.

Roman cement, common and hydraulic, lime.

Coke.

Numismatic, geological and natural historical collections for museums and cabinets.

Cork, in sheets or uncut.

Crucibles of all kinds and cupels.

Rock crystal, unpolished.

Sample books of drawings, writing and embroidery.
Glazed or tarred roofing paper, in sheets.
Emery, in powder or in grain.
Geographical or astronomical globes.
Spanish brooms.
Sperm, in cakes.
Oakum.
Cases for mathematical instruments and assaying.
Light-house lanterns.
Stone filters.
Dr. Pasteur's filters.
Filters of compressed coal.
Country views, without frames.
Fragments of wrecked vessels.
French beans.
Dry fruits.
Papes or cardboard designs, patterns, copies and models of art.
Chick-peas.
Engravings made by Guatemalan artists residing outside of their country, the authenticity of which is proved, without frames.
Grama (wheat grass).
Fuse for mines.
Peas.
Iron, in bars or pig, plates.
Assay furnaces and other instruments of refractory clay or graphite.
Lodestone.
Odorless closets of all kinds, except the piping in connection.
Fire-bricks for furnaces.
Fresh vegetables.
Printed books, unbound.
Locomotives, cars, utensils and material for railroads.
Lumber in pieces.
Hogs' lard.
Electric batteries and machinery, unloaded, for enterprises of public service.
Models of machines and buildings.
Patterns and samples of drawings, caligraphy and embroidery.
Molds for making artificial flowers.
Samples, without any commercial value and those that have value, the duties not to exceed \$1.
Lightning rods.
Newspapers, loose.
Petroleum, raw.
Natural stones of all kinds, unpolished, without names, for industries, and manufactures.
Slates and slate pencils.

Papier-mache, for the construction of buildings.
Slate for roofing.
Precious stones and fine pearls, unmounted.
Mill stones.
Live plants.
Platina, in paste or granulated.
Printing or lithographing presses.
Wooden pulps, rags and rags-waste for paper factories.
Vaccine.
Rakes and harrows for agricultural purposes.
Photographs of persons residing in the country, without frames.
Pita or jute sacks for the export of the country's fruits.
Tallow, crude or melted,
Seeds of flowers, vegetables and others not specified.
Wooden and glass roof tiles.
Thermometers.
Ink for printing.
Type for printing.
Japanese sauce, "Soy."
Plain glass, of all colors and sizes.

V.

MARBLE DEPOSITS IN COLOMBIA.

Mr. C. F. Z. Caracristi, Consulting Engineer, furnishes the following report on the marble deposits of the Cienaga District, in the Department of Magdalena, Republic of Colombia:

My investigations of these deposits have been somewhat thorough and offer scope for a much more elaborate and comprehensive report than I shall give in this statement. I shall discuss the general subject rather than elaborate on the scientific technicalities.

Resting on the granitic and basaltic rocks that form the geological plains upon which the more recent formations are stratified, and protruding through the coal measures, and separating the same for a distance of ten miles, between Rio San Juan and Rio Frio, are found the great marble deposits of the Atlantic Coast of Colombia. The stone is in a great mass, covering about sixty square miles, and rising in bluffs a thousand feet high from the sea level into the mountains of the Sierra Nevada de Santa Marta.

The layers of marble are from three to forty feet thick and have a "dip" of SW. 30° , and a "strike" of S. 21° $32'$ E. The "beds" are uniform and even, and the separating seams contain enough decomposed calcium to make the quarrying of dimension stone practical and easy.

The marble itself is a beautiful crystalline metamorphic limestone resembling in color, texture and chemical ingredients the celebrated statuary and bandillio marbles of Massa-Carrara, Italy. The crystals are of the most perfect cubes and others common to the calcium group, and the hardness of the stone is just a little above the standard average of the Italian marble. In color, the stone is white, gray, black, white with black or blue veins, gray with black or white veins, white with pink veins; etc. The "netting" of the veining is the finest I have ever seen in any quarry, and the marble is susceptible of the highest polish, and free from silica "blow holes" and other injurious substances. The stone has a smooth, even "rift" and "copes" with the precision of liniment; and withstands a crushing strain of 11,311 pounds to the inch. Chemically, the marble gives the following analysis:

Calcium.....	64.328 per cent	} =98.539 carbonate of lime.
Carbonic acid gas.....	34.211 per cent	
Magnesian carbonet.....	.425 per cent	
Alumina .....	.041 per cent	
Calcium sulphate .....	.500 per cent	
Loss, etc .....	.500 per cent	
<hr/>		
Total.....	100.000 per cent	

The above varies a little with the different colors, and I have taken the white as a standard. The other ingredients that form the color base of the veined marble are iron or manganese in the pink, carbon in several forms in the blacks, and copper and cobalt in the blue, etc. In weight, the marble is about standard, 168.5 pounds to the cubic foot.

From an industrial standpoint, the Colombian marble holds an enviable position, from the fact that the deposit is situated nearly at the center of the American Continent; is only one mile from the Carribean sea, and a few miles from the bay of Gaira, and but a day's sail from the Panama railroad, over which route shipments could be

made to the Pacific coast of the United States, and South America. The stone exists in unlimited quantities, and is by far the largest deposit yet discovered on the American Continent; and, of its class, one of the best deposits so far reported from any quarter of the globe. Its great value is in the proximity of the stone to the ocean, and the facility with which it can be transported to other sections of the American coast at reduced rates.

For example: The cost of transporting marble from the Georgia quarries to New York is about \$6, while the Colombian stone can be transported to the same port for \$3.65 per ton.

While reviewing the advantages of the Colombian marble deposits, I must call special attention to the fact that the stone would not be a competitor of any marble produced in the United States, but a competitor of the marble imported into this and other American countries, from Italy, France and Paros. The imports into the United States alone during the past year have amounted to over \$110,000, while South and Central American countries have imported even a larger quantity in the way of monuments, headstones, tiles and ornamental wares.

As in tropical countries the floors are generally tiled, the marble might be worked to fill the demands from this source. But as no marble quarry is at present being regularly operated in any of the South American countries the Colombian deposit has before it (if properly developed) the possibilities of a monopoly. By the use of Jamaica negro labor, I estimate the cost of producing a cubic foot of dimension stone at the quarry at about as follows:

	Cents.
Quarrying.....per cubic foot...	20
Sharpening and use of tools.....	" " " ... 2
Hoisting out of quarry	" " " ... 3
Incidentals	" " " ... 5
	—
Total per foot.....	" " " ... 30

Or 66 cents Colombian paper money at its present standard.

The value of the stone as taken from current prices is as follows in New York city:

	Per Cubic foot.
Statuary	\$9 00
No. 1	7 50
Average	6 00
No. 2 and light "Rutland Italian"	4 25
Mottled	4 00
Best No. 3	3 50
No. 3	2 25
Light blue	2 50

The Santa Marta railroad passes within half a mile from the marble deposits of the Cienaga, and the city of San Juan de la Cienaga lies on the shores of the Carribean Sea, only a mile north of the Marble Mountain. I consider the possibilities of the marble deposits of Colombia as worthy of investigation and attention. If placed in the proper hands and under an intelligent management, the property might be made to develop a profitable industry and add to the progress of Columbia and the advancement of its material resources.

VI.

GOVERNMENT LANDS IN MEXICO.

A bill reforming the laws relating to "Terrenos baldios," or Government lands, has been passed by the Mexican Congress.

The law which does not allow an individual to "denounce" and thus acquire more than 2,500 hectares (about 6,000 acres) of public lands is repealed. The quantity so obtainable will, therefore, be henceforth without any limit imposed by law.

All obligations to bring inhabitants to public lands are done away with.

Surveying companies are no longer to be bound to survey the lands into lots not exceeding 2,500 hectares each.

The public lands are to be classified, clearly defining those which are "baldios" (waste or idle lands), those which are national, and those which should be considered as excess, as well as those which should be taken to be surplus lands.

"Baldios," excess and surplus lands are to be sold at the prices fixed yearly.

The ordinary law of prescription is to apply to "baldios" lands, except that by "simple prescription" no one shall be able to acquire more than 5,000 hectares (about 12,000 acres) of said lands.

The possessors of lands to which they have no title are to have the prior right to buy them from the Government.

Two-thirds of the money paid for public lands are to go to the Federal Government and one-third to the particular State. The money paid for public lands situated in the Federal district and in the territories shall belong wholly to the Federal Government.

The money paid for lands classified as "National" shall go entirely to the Federal Government.

No titles granted by competent authority according to law, especially those granted by the Secretary of Fomento under the law of July 20, 1863, are to be in any way subject to revision, but are expressly ratified.

The Secretary of Fomento is authorized to deal with public lands. In order that arrangements and compositions may be legally entered into, it will be requisite:

A. That satisfactory plans be presented.

1. That the boundaries be determined.

There shall be established in the city of Mexico an office, to be called, "Great Registry of the Property of the Republic," in which all dealings with the public lands may be registered.

Provision is also made as to the method of registration, etc.

VII.

COMMERCIAL AND INDUSTRIAL INFORMATION.

British Trade with South America.

"The trading and financial position of South America," says a recent issue of the *South American Journal*, of London, "has so long lain under a cloud that it is most encouraging to find a perceptible renewal of confidence in the future of those States. So far, the feeling of trust is confined mainly to the States themselves, most of which have, during the past three or four years, made strenuous

efforts to regain their lost prestige, and in doing this they are likely to be assisted by capitalists in Europe, who will always be ready to take advantage of any improved strength in South American securities. The scope for the profitable investment of capital in that Continent is so enormous that it will require very little to bring about a feeling of confidence upon this side of the Atlantic. It is an obvious fact that, with the vast agricultural possibilities in Brazil and Argentina, to say nothing of the mineral deposits to which scarcely any attention has so far been given, those countries must, in course of time, undergo a very rapid development, notwithstanding the political troubles and other impediments that at present stand in the way." After reviewing British trade relations with South American countries, the *Journal* says: "But though our business with Latin American States is so considerable, it would scarcely be wise to ignore the fact that our position is by no means secure. In Argentina, the French manufacturers threaten to gain the upper hand of their English competitors, and both the German and Belgium makers are seeking to get a footing in that country. The chief danger for the moment, however, comes from the United States, where efforts are again being made to monopolize the trade of South America. By the aid of the Bureau which was formed some time ago, manufacturers are put into communication with buyers in South America, and facilities are offered for making known their goods throughout the different States. If British makers would act with equal energy in publishing catalogues in the native languages, and quoting weights and prices which South American buyers can understand, there would be little fear of British trade being seriously interfered with by competition elsewhere."

MEXICO.

A concession granted to General Enrique Mexia and Alfonso Lancaster Jones provides for the construction of various lines of railroads in the States of Chihuahua, Sinaloa and Sonora, Mexico. One of the roads will extend from the City of Guerrero to the Mormon colonies of Juarez and Porfirio Diaz and the colony of Palomas, with the right to build a branch to the city of Chihuahua. The second road is to extend from the same point in the State of Chihuahua to the port of

Mazatlan, with branches to Topolobampo, Alamos and Guaymas, and the coal fields of Sonora. The concession covers a period of seventy-five years, and is practically for the same territory as that provided for in the concession to John Young for the road from Deming to Guaymas, which concession was forfeited some time ago.

W. H. Carlson, mayor of the town of San Diego, Cal., and president of the San Diego and Phoenix Railway Company, has obtained from the Mexican Government a concession for a railroad from a point near Lijuana, in the territory of Lower California, to Yuma, Ariz., 175 miles long, with a branch to Ensenada, Lower California, fifty miles long.

The President of Mexico has decreed that:

1. Small importations of foreign merchandise, proceeding from the towns situated in front of the Mexican custom-houses, on the frontier, and destined for the use of frontier people, shall have exemption from custom-house duties, provided that the value of the merchandise does not exceed \$50.

2. If it is discovered that the value of the merchandise is greater than \$50, a fine of double the consular dues which the certification of the invoice would require, shall be imposed.

3. The importers shall present their declaration in quadruplicate to the administrator of the custom-house in pursuance to form 47. In these declarations, all the requisites of article 44 of the tariff law shall be complied with. The ordinance was to take effect January 1.

Under date of December 22 the President of Mexico has decreed the following, affecting the law of November 11, 1893:

ARTICLE I. The affidavit that the declared value of merchandise is correct shall be made by the manufacturers or sellers at the bottom of the copy of the invoice which shall be presented to the consul or consular agent, when the manufacturers or sellers ship the merchandise direct; but if the shipper is a commission agent or other person who is not able to present the said copy, duly sworn to, then he shall sign the same at the bottom of the consular invoice, and with responsibility, the affidavit referred to.

ARTICLE II. The affidavit shall be presented in the terms provided by the laws of the country in which it is made; and as to the form, it shall be sufficient for it to stand at the bottom of the copy of the invoice or in the consular copies; but if such laws do not sanction an

affidavit made in this form, a simple declaration as to the truth signed by the interested party shall be required.

ARTICLE III. The consuls and consular agents shall annex to the copy of the consular invoice, which should remain in the archives, the document containing the affidavit or declaration, making the fact known on all copies of said invoices in these terms: "Deposited in this consulate the affidavit or declaration relating to the value of the goods."

ARTICLE IV. When the custom-house through which the importation is made has reason to suspect that the declared value of the goods is not correct, the officials shall advise the Secretary of Finance accordingly, who, previously to making the necessary investigations, shall demand from the consignee, if it should happen that an alteration in the price has taken place, the amount of the defrauded consular duties, and furthermore inflict a fine of from \$10 to \$100, the amount of which to go to the credit of the revenue.

ARTICLE V. When the consuls suspect that the declared value of the goods is not the true one, they shall at once proceed to make the necessary investigations, giving an account of the result to the Secretary of Finance, in order that he may determine whether or not the fine referred to in the last article should be imposed.

ARTICLE VI. The fine which the preceding articles impose for fraud shall be inflicted without prejudice to the criminal responsibility which the maker of the alteration shall incur in conformity with the laws of the place in which the affidavit or declaration was made.

With reference to the development of fruit-growing in Mexico, a recent number of the *Mexican Financier* says:

A few years ago, the exportation of fruit from this country to the United States was scarcely thought of; exports to that great market were confined to silver in its various forms, henequen, a small amount of coffee, etc.; but with the newer railway facilities, it has become possible to place oranges grown here in the American cities in competition with oranges grown in the American States of California and Florida, to say nothing of the fruit brought from Spain and Italy. Much of this trade has been built up by the efforts of the traffic managers of the railways, and an express company controlled by the Mexican National Railroad has specially exerted itself to find a profitable market for various fruits formerly considered to have no possible foreign market. The fruit export trade has only

begun, and we may reasonably look for a steady increase therein during many years to come; for, with the continuous growth of American cities, the market for the large variety of exportable fruits is certain to expand. If our fruit-growers will give to this business the same careful attention that is paid to it in California and Florida, in Italy and Southern Spain, by improving the existing varieties of fruits, packing with care, and generally aiding exporters, there is no reason why Mexico, with its cheap labor, may not be able to hold a large share of the American trade. Sonora and Jalisco are already considerable exporters of oranges to the United States, and it is certain that large tracts of land in Chihuahua and other northern States are well adapted to fruit culture. Experience in the southern part of California, a region quite as arid before irrigation was secured as are extensive regions in Northern Mexico, proves that scientifically managed fruit farms are exceedingly remunerative.

The Secretary of the Treasury of Mexico, Mr. Limantour, has succeeded in bringing the expenses of the Government within \$19,000 of receipts. As appears from his annual report, which was sent to the Mexican Congress recently, this has been accomplished by reducing the annual expenses \$8,053,000, and by imposing new taxes which are expected to produce the sum of \$5,675,000 per annum.

The Chinese and Mexican Commercial Company, an organization composed of wealthy Chinese, is reported to have purchased a tract of 32,000 acres in the State of Sinaloa, Mexico, on which it is proposed to settle 5,000 of their countrymen. To each colonist, will be allotted sixty-four acres of land, for which he must ultimately pay. The company is said to contemplate the establishment of factories for the manufacture of boots and shoes, clothing, brushes, brooms and cigars, and for canning fruits.

The newly-organized Mexican National Steel Company, with a capital of \$3,000,000, is now in possession of the large iron and steel plants and deposits formerly controlled by the Durango Iron Mountain Company. It is expected that Richard Honey will be chosen President. The object of the company is to operate not only the mining of the great deposit of ore at Durango, but to put in working order various manufacturing establishments already built at different points in Mexico.

A large irrigation enterprise is about to be undertaken in Mexico. A contract has been signed with Engineer Scougall for works, consisting of a dam six miles above the junction of the San Juan and Rio Grande rivers, and some hundred miles of canal and laterals, which

will, when completed, permit of the irrigation of 500,000 acres of good cotton land. The *Two Republics*, of Mexico City, says: "The residents between the cities of Camargo and Matamoras are much elated over this scheme, and justly so."

The value of Mexican exports, including precious metals, during the fiscal year 1892-93, was \$87,509,221, against \$75,467,716 during the previous year, showing an increase of \$12,041,506. Over 25 per cent of this large excess was obtained from the exports of coffee. Henequen shows an increase of over \$2,500,000, and the precious metals an increase of \$7,331,001. Only a few products have decreased in value of exports. Among these is tobacco, which shows a decrease of \$287,238.

The invention of two Japanese for the production of fine thread from nettle hemp is attracting attention in Mexico, in view of the fact that the plant may be cultivated easily in different parts of Mexico. It is claimed that the new thread is likely to supersede, to a great extent, the finest silken thread. The nettle hemp is said to be three or four times as strong as silk, and not inferior in point of lustre.

A company is to be formed under the name of "The Agricultural and Colonization Company, of Chiapas," Mexico, with a capital of \$275,000. It proposes to introduce fifty families of colonists from Ireland. Cotton and coffee will be the chief products.

HONDURAS.

The following information as to affairs in Honduras has been furnished by Mr. James J. Peterson, United States Consul at Tegucigalpa:

The Government of Honduras has ordered all persons exercising any profession or trade, to register themselves in the month of January of each year, before the municipal authorities of their respective localities, stating their nationality, their place of residence, their age, their civil status or condition, and their profession or trade. This rule applies to all, whether citizens or foreigners. The latter will be exempted only in case of their being merely in transit. Each person so registered shall be provided with a ticket or certificate,

which shall be renewed every year, and for which the following fees shall be paid: Two dollars in case of scientific profession, commercial business or manufacturing industry; one dollar in case of trade of any kind if the registered artisan keeps shop; fifty cents if the registered artisan does not keep a shop. Simple laborers shall pay nothing for their certificate. The failure to register shall be punished by fines ranging from ten to fifty dollars and imprisonment if the fine is not paid. The laborers have to make all their contracts with their employer in writing, and two copies shall be made of the agreement, one for the laborer and another for the employer. If the agreement involves a compensation exceeding \$25, stamped paper has to be used. Whenever an employer finds himself in need of laborers whose services he is unable to secure otherwise, he may, on application to the Governor of the district, or to the Alcalde of the municipality, obtain the impressment into his service of a certain number of laborers. This forced labor will last no more than one month in each case, and will not relieve the employer from paying the laborer the proper wages. The refusal to do work under these circumstances, unless a proper excuse has been alleged and granted, shall be punished with imprisonment. This new law, called "A law providing rules and regulations for labor," came into force on January 1, 1894.

The Government of Honduras, by decree of December 5, 1893, has directed all the creditors of the State, on whatever grounds, to appear before the Secretary of the Treasury within the period of a month, to be counted from December 15 ult., and file their bonds, coupons, notes, bills, or any other evidence of indebtedness, in order that the same may be entered upon a register to be kept for this purpose. The failure on the part of the creditors to comply with this decree shall cause the payment of the unregistered debt to be postponed, and no interest shall be paid on account of this postponement.

Arrangements have been made at Tegucigalpa, the capital of Honduras, for the construction of a street railway, and Don Carlos D. Beyer has been sent to the United States to secure material and everything else required for this undertaking.

An effort is being made by General Vasquez, the President of the Republic, to liquidate the domestic or internal debt of Honduras. It has been found thus far that the said debt amounts to \$3,587,120.74;

but it is apprehended that when the investigation is ended that amount will be increased to \$5,000,000.

The Republic of Honduras, for the purpose of promoting agriculture, and especially the cultivation of coffee, cacao and India-rubber trees, has ordered a premium of 5 cents per tree in the case of coffee, and 10 cents per tree in the case of cacao and India rubber, to be paid all farmers who have planted in their respective States, either 5,000 coffee trees, at least, or 2,000 cacao or India-rubber trees. To secure this premium, the farmer shall apply to the local authority, called *alcalde*, who shall at once proceed, accompanied by two witnesses of unimpeachable character, to examine the plantation of the applicant, and, upon the result of his personal investigation, the proper certificate shall be issued and delivered to the farmer. The collector of revenue of the province shall pay, on presentation of this certificate, in coin, the amount of the premium which corresponds to the number of trees. The premium shall be paid even if the farmer has been granted any other privilege or exemption or recompense for the cultivation of the same trees.

The Government of Honduras has established a tax of 25 cents per *manzana* (about two acres) on all mining concessions, whether already granted or to be granted in the future, either to natives or foreigners. The tax is to be paid annually, in the month of January, to the collectors of revenue of the respective districts, and the amount of money raised by this means shall be used to pay the premium granted to the cultivators of coffee, cacao and India-rubber trees. The failure to pay this tax in the period of time established, shall cause the concession to be forfeited.

BRITISH HONDURAS.

A recent number of the *Colonial Guardian*, of Belize, British Honduras, says: We are glad to hear that arrangements for the establishment of mail communication between New York and Belize are approaching completion; for there were rumors about that there was a deadlock in the negotiations between the mail contractor and the Government. We presume that this service will include Jamaica: otherwise, the arrangement will be a comparatively unim-

portant one, for the only means of getting laborers for the development of the agricultural resources of the colony is by communication with the West Indian Islands. The *Colonial Guardian* also expresses its gratification at the prospect of an attempt to render the Belize River navigable, "for no enterprise," it says, "would tend so much to develop the agricultural resources of British Honduras, except the construction of a railway through Crown Lands to the frontier, as the establishment of steam navigation between Belize and the Cayo."

The same newspaper publishes a dispatch from Lord Ripon, British Secretary of State for the Colonies, granting the request of the people of Honduras that a gold standard be adopted for the currency of the Colonies. Lord Ripon requests that the Colonial Government shall submit to him its final views as to the measure of value which should be adopted, and says the choice clearly lies between the gold dollar of the United States of America and the British sovereign, and inclines to the adoption of the latter.

At a public meeting held in Belize subsequently, the following resolutions were adopted:

1. That this committee is of opinion that the gold dollar of the United States of America should be the future measure of value in this Colony; that the gold coins of the said States and the paper currency of the said States which, by the law of the said States is redeemable in gold, be legal tender to any extent; that the silver coins of the said States be legal tender to the extent of \$10, and no more, and all other coins of the said States to the extent of 50 cents, and no more.
2. That this committee is of opinion that the Colonial Government should issue demand notes of denominations varying from \$1 to \$100 against a sufficient specie reserve in the Colonial Treasury.
3. That this committee is of opinion that the proposed change of standard should not interfere with existing contracts, but that the determination and settlement of these should be left to voluntary arrangement.

The Governor of British Honduras suggests that a bank may be established in the Colony on the change of the currency from a silver to a gold standard.

BRITISH WEST INDIES.

The Bureau of the American Republics has received a full synopsis of the report of the Collector-General of Jamaica for 1892-93. From

this report, it appears that during the year 1892-93, which was the first complete annual period under the operations of the revised tariff with the United States, the amount of duty fell off, as compared with the previous year, but it was £17,000 in excess of the average of the five years ending March 31, 1890. With regard to the value of the imports for the year, the figures, it is stated, show a satisfactory increase. The imports are divided into four classes: Food and drink, raw material, manufactured articles, and coin and bullion. The third class, manufactured articles, represented 55 per cent of the total. The largest proportion of the first class, food and drink, was drawn from the United States. In fact, rather more than one-half in value of imported food and drink was furnished by this country. Canada is also largely drawn upon, Great Britain supplying only one-fifth. But in manufactured articles, Great Britain leads, 75 per cent of the goods being imported from that source. Of the total imports entered for home consumption, Great Britain contributed in value 52 per cent and the United States 34. A large increase is noted in the trade in imported cattle which has sprung into prominence within recent years. South America and Cuba are the sources of this supply. On few items, it is stated, has the change in the tariff told with greater effect than on refined sugar. The remission of the duty has caused the quantity imported to increase more than five-fold during the year. The exports from Jamaica show a considerable increase, due to greater outputs of what are now becoming the staple products of the Island, such as coffee, cacao, pimento, etc. The increase in cacao is especially noticeable, the value of the quantity exported last year being double that shipped four years ago. Coffee also shows a steady growth in quantity and value. Bananas and oranges show a considerable increase. The exports of honey have doubled in value since 1889. There was a decrease (though not a marked one) in the quantity of sugar exported. The export of woods, such as lacewood spars, bitter wood, fustic and logwood, shows a large increase.

The practicability of producing a good article of tea for commerce in the Island of Jamaica, is attracting attention there. The climate and soil are said to be well adapted, and tea of good quality grows rapidly in the Island. The difficulty in the way of tea cultivation is the want of labor, but in those districts where the proper kind of labor

can be secured, the plant, it is thought, might be grown successfully. The *Kingston Gleaner* says that good tea grown in the Island would find a market in the United States, and that in view of the favorable conditions for establishing the industry, it is thought to be strange that no effort in the matter has been made.

A select committee appointed to consider the question of the establishment of a labor bureau in the colony of Trinidad, British West Indies, has reported to the Colonial Government that, with the view of protecting the colony against the introduction of vagrants and other undesirable immigrants, it is important that the bureau be established. The report recommends that the bureau be under the supervision of the Immigration Department; that a depot shall be provided, to which all "Deckers" arriving at the port shall be sent immediately on landing, and where they will be subjected to medical and police inspection. After this, they will be taken in charge by an officer of the bureau whose duty it shall be to ascertain those who are in quest of employment, and the nature of the employment desired, and, so far as possible, to put them in the way of obtaining it. To this end, a register, showing the names and addresses of all applicants for employment, is to be kept at the depot, and planters, householders, shopkeepers, etc., are to be asked to communicate with the depot if they are in quest of servants, laborers or shopmen. Ordinary traders or hucksters may be exempted from the requirements of the law regulating the bureau.

From a report on the trade and finances of the British Colony of St. Vincent, West Indies, it appears that the revenue of the colony in 1892, showed an increase of about \$2,000. The opinion is expressed that while this increase is but slight, it is, nevertheless, satisfactory, in view of the new fiscal arrangements necessitated by the McKinley tariff agreement. The revenue laws passed in connection with this agreement involved an estimated decline in certain import duties of \$8,000, less an increase in duties on spirits of 6d. a gallon. The net loss of revenue by import duties was about \$5,700. The general revenue, however, was sustained, against this loss, by the increase in the duty on imported spirits, a similar increase of the excise duty on the native spirit (rum), and an increase in the export duty on sugar. The trade with the United States shows a decrease of imports into St. Vincent of about \$5,600. The direct

trade with the United States which existed in 1891 was discontinued in 1892, and merchandise imported from the United States was carried via Barbados and treated in the customs returns as imports from that colony. The decrease therefore is regarded as merely nominal. The value of exports in 1892 was about \$590,000, showing an excess over 1891 of about \$95,000.

NICARAGUA.

In a letter to the United States Department of State, Dr. J. Crawford, of Managua, Nicaragua, calls attention to the existence in the northern and central mountainous parts of that country of large areas of coffee lands of excellent quality, evidently capable of annually yielding large crops—two and one-half to four pounds per tree, of an excellent aroma coffee. About 5,000,000 coffee trees, he says, “have been planted in that district, of which about 3,500,000 trees have been planted by our people (principally Californians, Coloradans, and Georgians). There yet remain many thousands of acres of those national, unoccupied lands suitable for coffee growing. Also, there are yet unoccupied in Nicaragua many thousands of acres of land admirably adapted to the cultivation of the cacao (theobroma) tree—a native or indigenous tree here.”

CHILE.

A synopsis of the prospectus of a company for the manufacture of iron and steel in Chile, based upon the concession granted by the Chilean Congress to Charles E. Lister, has been received. Mr. Lister is granted for three years, free, all the scrap iron and steel belonging to the State, and pieces of rail not exceeding sixty centimeters in length, the three years to count from the time the works may be in running order. At the conclusion of this period, the owners of the concession will be entitled, during a further period of fifteen years, to the same materials, subject to the payment of a nominal price of 7s. 6d. per ton. They will also be entitled, during ten years, to import, duty free, sulphuric acid, muriatic acid, borate of soda, sal

ammoniac, and metallic antimony to a total value of \$15,000 per annum, and the sole and free use of 100 meters of sea frontage in the Bay of Talcahuano for twenty-five years. It is proposed to erect the works at Talcahuano, in close proximity to the bay, and the sea frontage granted will be used for wharves and warehouses. Mr. Lister estimates that 10,000 tons may be produced from the scrap iron available in Chile. The capital of the company is \$1,000,000. Heretofore, the scrap iron of Chile has been sold at a very low figure and exported. It is hoped that the company will lead to the development and extension of iron manufacture in Chile, and that ultimately, it will be to the company's interest to produce iron from the ore.

The Chilean Government has agreed to raise from 4 per cent to 5 per cent a guarantee given to the Messrs. Clark on the capital to be expended in building the Chilean portion of the Trans-Andinerailway. It was stated that if this guarantee was secured, the work of completing this great trunk line between Buenos Ayres and the principal points in Chile, would be carried forward energetically. The distance to be completed is some thirty miles, but, as this includes very heavy construction in the Andes, considerable time must elapse before it is finished.

The municipality of Santiago, the Chilean capital, has granted a concession to Senor S. Ossa for the construction of an electric tramway between that city and San Bernardo. It is also stated that the gas company of Valparaiso will shortly provide the principal streets of that port with electric light.

AMERICAN TRADE IN ECUADOR.*

The advisable course to pursue in order to foster a trade with these countries (Guayaquil being the commercial metropolis for a vast extent of territory) would be to send hither competent men, who speak Spanish, to study the necessities of the trade and report to their employers. One man at first might represent several branches of trade. The Government can never build up a trade with these countries. Our countrymen formerly had an instinct for foreign trade; they must cultivate it anew.

* From Advance Sheets of United States Consular Reports, February, 1894.

There is a great field here for our simplest agricultural implements—plows, hoes, etc. The machete is the agricultural implement used here. If a live man were sent here with plows, hoes, and other simple implements of agriculture, prepared to go on the haciendas and show the people how to use them, and the immense gain in using them, I do not think the result would be doubtful.

I have never seen corn meal in Ecuador; it is unknown, at least in the vicinity of Guayaquil, and yet large quantities of corn are produced. Corn mills might be introduced, with little expense, into the corn-producing regions, such as that of the rich lands on the Boliche river, where I ate several meals at a great hacienda where there was not seen a crumb of bread except what our party carried along. Yet on this place were hundreds of bushels of very fine corn. *Yuca* is used instead of bread. It is a great root, somewhat like the sweet potato of our Southern States, but not so good.

I make these observations to indicate what might be accomplished by a little enterprise properly directed.

GEO. G. DILLARD,
Consul-General.

GUAYAQUIL, *November 4, 1893.*

A commission has been appointed to revise and correct the tariff of Ecuador, which is said to be faulty in many respects. As an instance, the fact is cited that common wood mouthpieces pay the same high duty (which is levied on the gross weight) as pure amber cigar-holders. Ron, a common name for raw spirits, is a prohibited article, and the same prohibition is applied to Jamaica rum, which is not manufactured in Ecuador. These and other anomalies, it is hoped, will be corrected by the commission

MISCELLANEOUS.

Information has been received of the results of the expedition of Mr. R. Fowler MacKenzie to the headwaters of the Amazon, in Peru. Mr. MacKenzie went out in August, 1892, as special commissioner to the Peruvian Corporation for the purpose of exploring, opening up with roads and bridges and placing suitable colonists in the lands of the Corporation, situated mostly on the rivers Perene and Tambo.

Mr. MacKenzie speaks of the territory as one of great promise as a coffee growing center. The climate he describes as suitable for Europeans, the soil fertile and covered with valuable timber. Cattle may be raised on the more open lands. He built some forty kilometers of road and a number of bridges. A township, called Denville, has been founded and some thirty colonists' families are established on lands. Steam communication from the Perene territory to the Amazon was one of the chief objects of Mr. MacKenzie's efforts, and he expresses the opinion that this may be obtained in spite of the obstacle of the cascades on the Perene.

Dr. William Stewart, British consul in Paraguay, speaks favorably of the prospects of the Australian colony recently established in that country. It is situated about ten leagues from Villarica in a high region. Dr. Stewart reports that the Australians are engaged in baking bricks, ploughing land and sowing mandioca, maize, tobacco, etc. They are said to be total abstainers from alcoholic drinks. The severest discipline is enforced, and all profits of the colony are to be divided equally among the members. Six hundred more Australians were reported to be on the way out to join the colony. Whatever may be the economic results of this experiment, it is thought the presence in Paraguay of these industrious immigrants can not fail to be beneficial.

Two laws have recently been passed by the Congress of the Argentine Republic; one to repress the manufacture of bogus wines, which has assumed considerable proportions under the stimulus of high import duties; the other for the liquidation of the old National Bank, with liabilities amounting to \$30,000,000 currency, as regards the public, exclusive of \$80,000,000 currency due to the National Treasury. No estimate is given of what the assets may realize.

The President of the Argentine Republic, has promulgated a decree approving the extradition treaty with Italy drawn up in 1886, but only just sanctioned by the Argentine Congress. An extradition treaty with England, which has been pending for five years, has recently received the sanction of the Senate, and is expected to receive that of the deputies.

The Italian Steamship Company "La Veloce" has given notice that beginning January 1, 1894, and on the 1st of each following month, a steamer of the company will be dispatched from Genoa, calling at

a port in Spain, St. Thomas, West Indies; La Guayra, Venezuela; Cartagena and Colon, Colombia, visiting the same ports on the return journey. The company also proposes to establish a subsidiary line of steamers in connection with the main line, to trade between St. Thomas, the West Indies and Central American ports, with headquarters at St. Thomas.

The President of Guatemala, on the 6th of November, laid the foundation stone of the station at Guatemala City of the Northern railway, which line, when completed, will connect the Atlantic and Pacific oceans. A Belgian engineer is to have charge of the works on the south end of the line. Satisfactory progress on the northern sections is reported. The physical difficulties are said to be far fewer and the progress of the works much more rapid than was anticipated.

A syndicate of American capitalists has recently made a proposal to the Government of Bolivia, to take charge of a series of enterprises, of which the principal are the working of the rubber forests, the making of roads, and the establishment of a mint and a bank.

Statistics have been received of the foreign commerce of the Republic of Uruguay, for the third quarter of the year 1893. These show the total imports to have been \$4,918,593, and the total exports, \$5,442,457. For the same period of 1892, the imports were \$4,651,124, and the exports, \$3,520,447. While the increase in imports has been slight, the exports have increased by nearly \$2,000,000. For the first nine months of 1893, the imports amounted to about \$15,000,000, and the exports to \$21,500,000, making the excess of exports, \$6,500,000.

I.

COSTA RICA AT THE WORLD'S FAIR.

COSTA RICA AT THE WORLD'S COLUMBIAN EXPOSITION,
CHICAGO, 1893. BY JOAQUÍN BERNARDO CALVO,
COSTA RICAN COMMISSIONER.

As appears from the official publications, the government of Costa Rica, as soon as the invitation to participate in the World's Columbian Exposition reached its hands, decided to give it the most careful attention, and issued orders for the gathering of choice samples of all natural, agricultural and industrial products of that rich country to be exhibited in the great contest of the civilized world. There were two reasons that principally influenced the Costa Rican government in making that decision: First, its desire to bind more intimately the existing intercourse of friendship and commerce with the United States of America; and, secondly, the consideration that, as the great city of Chicago, situated in the center of this great country, is the emporium of trade, and the unrivalled railroad center of the world, it offered all kinds of facilities to that object, and was consequently a sure guarantee of success to the Exposition.

In order to carry the said decision to success, the Executive recommended the project to the National Congress, and that body appropriated, to meet the expenses of the Costa Rica exhibit, the sum of \$150,000, which, proportionately to the number of inhabitants of the Republic, is larger than the amount granted for the purpose by any other nation.

As soon as the appropriation was made, Señor Don José Joaquín Rodríguez, the president of the Republic, ordered an office to be opened, wherein all the products and objects to be exhibited in Chi-

ago should be collected; and there, under the active and wise direction of Don Joaquín Lizano, and Don José Vargas, M., who succeeded each other as head of the Department of Promotion of Public Welfare, and the active co-operation of Don José Lino Matarrita, of Nicoya, Don Trinidad Vargas, of Golfo Dulce, and Don Teodoro Koshney, of San Carlos, the collecting of the exhibit was started. According to the catalogue, the most valuable exhibit of products was due to the efforts of the latter gentleman.

At the same time that this work was being carried on with an amount of interest never before shown in the country on similar occasions, the government sent instructions to Don Joaquín Bernardo Calvo, chargé d'affaires of Costa Rica, at Washington, for the selection of a site and the construction of a building as well as for the acquisition of all the fixtures required. He was also authorized to take all necessary steps with the officers of the Exposition for the success of the undertaking.

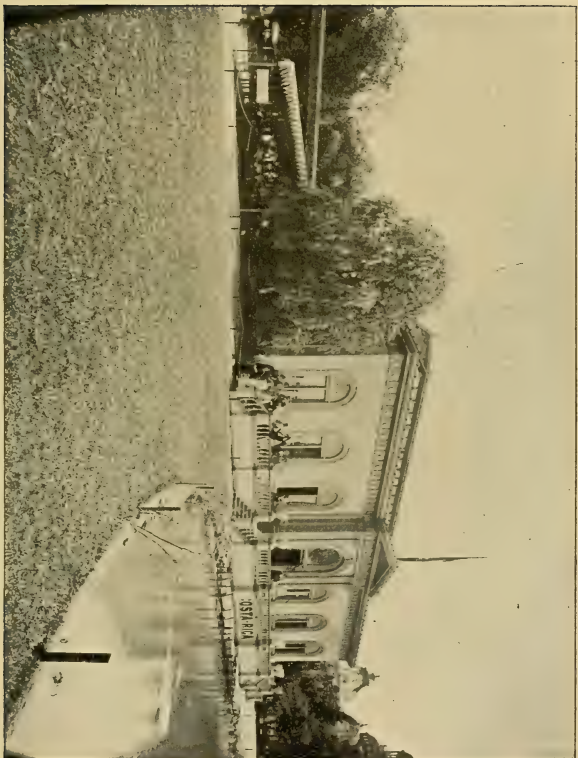
It was unfortunate that, during the course of these preparations, the danger of an invasion of cholera overshadowed the country and interrupted for awhile their progress. It was feared also that the Chicago Exposition itself could not be carried out on account of the quarantine, and because some cases of cholera had appeared in the city of New York.

Costa Rica was then obliged to close her ports, and to abandon for the moment, almost completely, all projects referring to the Exposition. To this calamity, another of serious consequences, namely, the fall in the value of silver and the consequent rise of the rates of foreign exchange, befell the country.

These great obstacles were not sufficient, however, to effect a radical change in the decision already made on the subject, and as soon as the fear of the cholera was over, the government resolved to follow the former plan, and ordered at once the continuation of the preparations. But the time then was rather limited, and it is therefore to be regretted that none of the collections of the products could be exhibited complete.

THE COSTA RICA PAVILION.

For the reasons stated above, it was considered necessary to set aside the plans for the pavilion, as they had been drawn in Costa



THE COSTA RICA BUILDING, LOOKING WEST.

Rica and approved, and others, more economical, drawn by Architect James G. Hill, of Washington, D. C., following the indications of the engineer, Don Nicolás Chavarría, M., director of public works of Costa Rica, were adopted in their place.

The contract for the construction was entered into between the chargé d'affaires, Mr. Calvo, and Messrs. Cass, Chapman & Co., of Chicago; but these gentlemen, on account of the pressure of time, were unable to finish their work before the 1st of May, the day on which the Exposition was inaugurated,

The Costa Rican building was situated at the east end of the North pond, facing west, and the location was one of the best within the grounds. Across the North pond, which offered a most beautiful perspective, and within a distance to be fully appreciated, were the Illinois, Washington, Indiana, Ohio and Wisconsin buildings. To the right, were the galleries of Fine Arts, and on the left, the buildings of Guatemala and Brazil, while as a background, and not far distant, Lake Michigan murmured its praises to the efforts of mortal man.

The building was Doric in style; 103 feet long by 60 feet wide, two stories and clerestory, making the full height 50 feet. On each side, there was a Doric portico 22 feet wide, supported by four large pilasters. On the west front, a spacious platform, with a handsome balustrade, adorned with beautiful stone urns brought from Costa Rica, led up to the main floor; and opposite this front entrance, broad double stairways led to the second, or gallery floor, supported by eighteen columns rising to the full height of the clerestory.

The cornices, frieze molding, caps and bases, window casements, etc., were made of iron. The main walls were cemented, and all was painted in soft colors. The inside walls were plastered, and the walls and timber work were frescoed in a modest and becoming manner.

The building was lighted by twenty large double casement windows in the first story, and ten large skylights in the roof of the clerestory, while on all sides of the latter, the windows were pivoted so that, when opened, they could afford perfect ventilation. Ample toilet rooms were provided on each floor. Over each main entrance to the building the national coat-of-arms of the Central American

Republic in bold relief was placed and constituted a striking addition to the decorative part of the work. The building cost \$20,000.*

THE COSTA RICAN COMMISSION.

When the products to be exhibited were ready, and all the necessary preparations in Chicago had been completed, the Government issued the following decree:†

No. 112.]

SAN JOSÉ, March 29, 1893.

The President of the Republic has resolved to organize the Commission that is to represent Costa Rica in the approaching International Exposition of Chicago in the following form:

President, Señor Don Manuel M. Peralta, E. E. and M. P., from Costa Rica at Washington.

Secretary, Señor Don Joaquín Bernardo Calvo, Chargé d'Affaires of Costa Rica at Washington.

Vice-President and Commissioner-General for Agriculture and Industry, Señor Don David J. Guzmán.

Vice-Secretary and Commissioner for Archæology, Señor Don Anastasio Alfaro.

Signed by the President.

(Countersigned)

VARGAS, M.

The Commission did not meet in Chicago until about the middle of May, and during that period, Messrs. Calvo and Alfaro were in charge of the work; co-operating with them, was Dr. Francisco J. Rucavado, who afterward was also appointed commissioner.

INSTALLATION.

As to the interior of the pavilion, the plan generally adopted in the arrangement of museums was followed: A large hall surrounded by a gallery accessible by two staircases, placed one on each side of the eastern entrance of the pavilion, as has been said; handsome glass cases, containing natural and agricultural products, arranged in classified groups beneath the gallery on the main floor, in the center of which rose a high graceful pyramid, formed of minerals, having two others, composed of specimens of wood, placed on its sides.

* The foregoing description of the building appeared in the General Catalogue of the World's Columbian Exposition.

† La Gaceta, Diario Oficial, No. 74, March 30, 1893.



INTERIOR OF THE COSTA RICA BUILDING, LOOKING NORTH.

Each one of the corners of this floor was occupied by glass cases containing samples of beautiful silk fabrics in the favorite colors of the people of Costa Rica, in the shape of scarfs, mantillas and wraps, all of which gave due credit to the industry of the country on account of their fine workmanship.

A precious collection of gold and silver jewels, and of gold and tortoise shell combined, very carefully worked throughout, alongside of a complete collection of the national coins, and two of foreign coins, a complete collection of bank notes, and of the national postage stamps, presented one of the attractions of the exhibition.

Fishing utensils and implements used in the country were exhibited, and a collection of fish, preserved in alcohol, showed the varieties of this product, both in salt and fresh waters.

At the northern extremity of the same floor, the aromatic and delicious Costa Rican coffee was served. The space inside not being large enough to accommodate the always increasing number of persons drawn by the celebrity of this peerless product of Costa Rica, an addition was made to it on the outside of the building with a capacious awning covering.

At the southern extremity of the gallery, there was a drawing-room, decorated with elegant curtains. Here we saw the portraits of the President of the Republic, Señor Rodriguez; of the four Secretaries of the Executive, and a handsome view of the city of San José, the capital of Costa Rica.

At the other extremity, there was a panoramic view of the steep heights of the volcano of Irazu, the only place in the world from which the Atlantic and the Pacific Oceans can be seen simultaneously. On the principal sides of the gallery, and in glass cases arranged as those on the first floor, the magnificent school exhibits of which Costa Rica can be proud, were placed; sundry articles made by women—among these two needle-embroidered pictures on silk; pita hats (generally known as Panama hats), and different kinds of implements, such as brushes, harnesses, saddles and other like articles, as likewise sundry articles of wrought and cast iron, etc., and an extensive collection of photographic views of interesting places, buildings, coffee patios, machinery, railways, roads, villages and types of the natives, etc. At one side of the hall, were a considerable number of literary works, written by Costa Rican authors; maps, drawings,

reports, and other official publications, which give honor to their country. In this section of the exhibition, special mention is due to the National Museum of Costa Rica, for the very rich and extensive collection of stuffed animals, the ornithological part being very remarkable and attractive.

Coffee plants, palm trees and Costa Rica orchids and flowers were blended together with the national colors, forming the decoration and ornamentation of the large hall. If the appearance of the unpretentious but elegant building of Costa Rica caused a very pleasing impression when seen from the outside, the view of the interior produced a real surprise on account of the magnificent *tout ensemble* it presented to the spectator.

LIST OF THE EXHIBITS.

The exhibit of Costa Rica was characteristically a display of the products of the land. Classified according to the regulations issued by the Chicago Exposition, it was comprised in the following groups:

DEPARTMENT A.—AGRICULTURE.

GROUP NO. 1.—Wheat of various kinds, Indian corn of all varieties, barley, rice, wheat flour, yucca flour, corn meal, bran.

GROUP NO. 2.—Biscuits and crackers, vermicelli and macaroni.

GROUP NO. 3.—Cane sugar, native honey of five varieties, exotic honey, confectionery.

GROUP NO. 4.—Potatoes, sweet potatoes, yams, radishes, turnips, beets, onions, peanuts, roots for starch.

GROUP NO. 5.—Beans of twenty-three different kinds.

GROUP NO. 6.—Prepared cocoanut.

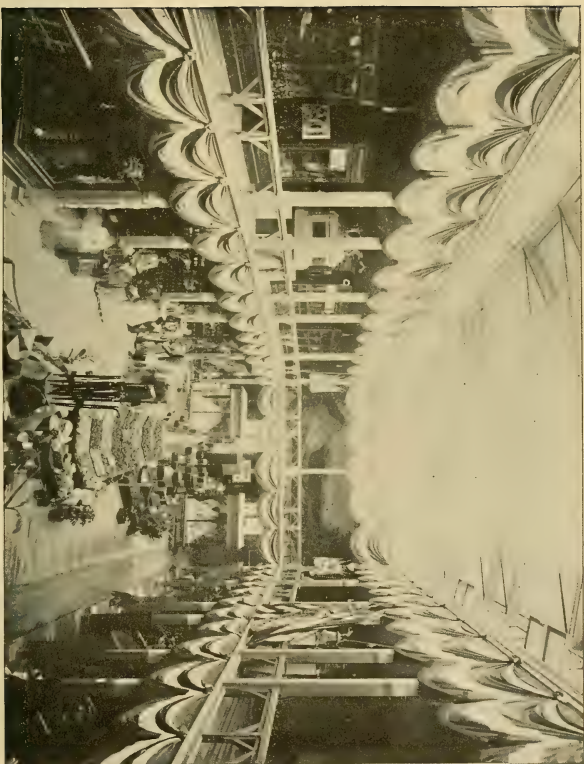
GROUP NO. 7.—Cheese (never came).

GROUP NO. 8.—Coffee of various kinds and in its different grades of preparation, Liberia coffee, cacao, chocolate, pepper, cloves, anise and other spices, tobacco in the leaf.

GROUP NO. 9.—Cotton, ochreous color cotton, nineteen varieties of vegetable fibers, native silkworms, horse hair as a harness material.

GROUP NO. 10.—Twenty-two different kinds of mineral waters, ten different kinds of thermal waters.

GROUP NO. 11.—Wines, rums, cognac and other spirits; cordials and liquors, bitters, vinegar, chicha.



INTERIOR OF THE COSTA RICA BUILDING, LOOKING SOUTH.

GROUP No. 12.—Beers, ales, porter, stout.

GROUP No. 13.—Photographs of fences, farm buildings, farm-houses, patios for drying coffee.

GROUP No. 15.—Statistics of coffee farms.

GROUP No. 16.—Coffee machinery. (See Group No. 79.)

GROUP No. 17.—A large collection of hides and skins of eighty-two species of wild animals, tortoise shells of various kinds, fossil tusks and molars of mastodons.

GROUP No. 18.—Animal oils of eleven kinds, whale oil, fish oil, lizard oil, tortoise oil, etc., vegetable oils of seven kinds, linseed oil, fig oil, palm oil, etc; soap of various classes; stearine candles, two kinds.

FORESTRY—FOREST PRODUCTS.

GROUP No. 19.—A collection of 463 samples of different kinds of wood and timber used in construction and manufactures; ornamental and fancy woods, mahogany, cedar, etc.

Twenty-nine classes of dyeing, tanning and coloring plants.

Barks of various kinds; vegetable substances used for bedding and upholstering.

Gums and resins of fifty different classes, vegetable wax, India rubber, copal, turpentine, balsam of Peru, etc.; seeds and fruits for ornamental purposes, vegetable ivory, cocoanut shells, ornamental gourds, medicinal roots, sarsaparilla, herbs, barks, mosses, berries.

Baskets made of fibers.

DEPARTMENT B.—VITICULTURE.

GROUP No. 20.—Maranon wine, Coyol wine, brandy, cordials, rum and cognac.

POMOLOGY.

GROUP No. 21.—Peaches, quinces, apricots, oranges, lemons, citrons, limes, pomegranates, bananas, pineapples, guavas, mangoes, papaws, tamarinds, figs, sapotillos, anonas, mammee, etc., by imitations made in wax. Almonds, cocoanuts. Vinegar made from bananas.

FLORICULTURE.

GROUP No. 22.—Seventy species of orchids, palms, ferns; herbarium of sixty-two classified species.

CULINARY VEGETABLES.

GROUP NO. 23—Thirty-seven species of beans, vetches, lentils, peas, peppers, tomatoes, cucumbers, squashes, melons, eggplant, etc; beets, turnips, potatoes, sweet potatoes, cassave, yucca.

ARBORICULTURE.

GROUP NO. 25—A collection of ninety ornamental trees and shrubs.

DEPARTMENT C.—ANIMALS.

GROUP NO. 34—Collection of 692 stuffed birds of Costa Rica.

GROUP NO. 35—Collection of 789 insects.

GROUP NO. 36—Collection of stuffed animals native to Costa Rica.

DEPARTMENT D.—FISH AND FISHERIES.

GROUP NO. 37—Collection of sponges and corals, conches and shells. Specimens of marine and fresh-water fish.

GROUP NO. 38—Fishing gear, fishhooks, nets and seines, harpoons, gaffs, etc.

GROUP NO. 40.—Fish oil of various kinds, polished shells.

DEPARTMENT E.—MINES AND MINING.

GROUP NO. 42.—Collection of seventy-four minerals, gold and silver bearing ores, gold, silver, iron, copper and lead ores; silver, iron and copper bearing ores; serpentine; iron and lead ores; mercury; lead and zinc ores, meteoric iron.

GROUP NO. 43.—Lignite, tuba, etc.

GROUP NO. 44.—Alabaster and marble; marble, black and white; granite and other stones; petrified wood.

GROUP NO. 46.—Basanite, obsidian, clay, etc., yellow marl; labradorite, feldspar, etc.

GROUP NO. 47.—Limestone, lime, carbonate of lime, carbonate of lime crystallized; gypsum.

GROUP NO. 48.—Salt, sulphate, etc., sulphate of lime, marl, gypsum, etc., sulphur and pyrites, chalk, fossil shells.

GROUP NO. 67.—Maps of the mines of Monte del Aguacate; plans of the mines of Monte del Aguacate.

DEPARTMENT F.—MACHINERY, ETC.

GROUP No. 75.—Portraits and lithographic groups, maps, charts, etc.; collection of diplomas, etc.; specimens of printing.

GROUP No. 79.—A machine for preparing coffee. (See group No. 16.)

DEPARTMENT G.—TRANSPORTATION.

GROUP No. 83.—Harness, robes and accessories of the stable, whips, etc.; bridle reins and bits, spurs, saddles, saddlebags, trappings and accoutrements of horses.

GROUP No. 85.—Ropes, cordage.

DEPARTMENT H.—MANUFACTURES.

GROUP No. 87.—A collection of drugs and other preparations.

GROUP No. 89.—Specimens of binding, bookbinding; penholders, paper cutters made of tortoise shell and gold.

GROUP No. 91.—Shell work, polished shells; mosaics made of shells.

GROUP No. 92.—A collection of twelve stone urns.

GROUP No. 96.—Specimens of wood, carved; collection of utensils made of wood, carved; silver and wood shovel used in the inauguration of the Costa Rica Railway to the Atlantic.

GROUP No. 98.—Jewelry, rings, bracelets, necklaces, charms, medallions, gold covered and gilt jewelry, napkin rings, nail cleaners, combs, paper knives.

GROUP No. 100.—Silk shawls, scarfs, wraps.

GROUP No. 101.—Mats and cigar cases made of rushes, Panamá hats.

GROUP No. 104.—Cloaks, mantillas, ladies' and children's costumes, boots and shoes. (The latter never came.)

GROUP No. 105.—Collection of furs and skins, some of them tanned.

GROUP No. 106.—Embroidered portraits, embroidered handkerchiefs, napkins, etc. Various samples of needlework; artificial flowers, trimmings of various classes.

GROUP No. 107.—Combs, brushes, etc.

GROUP No. 108.—Cigar cases, canes of ornamental woods.

GROUP No. 110.—Vases, boxes, chessmen, fancy articles made of aromatic and ornamental wood, billiard balls and cues.

GROUP NO. 111.—Tanned leathers. (Never came.)

GROUP NO. 118.—Wrought iron, artistic forgings.

DEPARTMENT L.—LIBERAL ARTS.

GROUP NO. 149.—General and complete school exhibition, handwriting, drawing, etc., needlework, embroidery, etc. Collection of text-books used in primary and higher schools, plans and photographs of school buildings, annals, reports, statistics, etc.

GROUP NO. 150. Very extensive collection of national publications, natural sciences, literature, history, geography, statistics, magazines and newspapers; bindings, specimens of typography, illustrated papers, schoolbooks, government and other official publications, maps, etc.

GROUP NO. 151.—Very extensive collection of photographs.

GROUP NO. 152.—Hydrographic survey of the Gulf of Nicoya and the harbor of Culebra; plan of the city of San José; plans of buildings.

GROUP NO. 153.—Reports of foreign relations; collections of postage stamps; civil and penal law of Costa Rica.

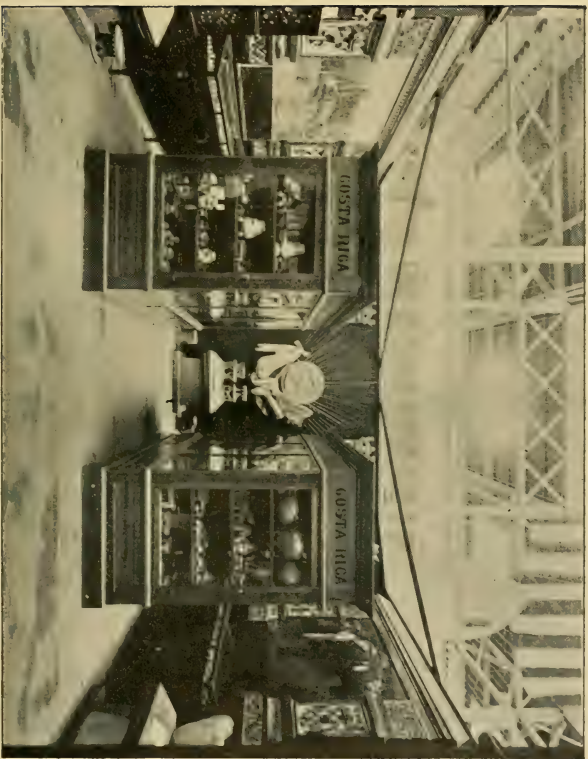
GROUP NO. 154.—Statistics of trade and commerce; government exhibit of coins, bank notes, moneys, postage stamps, etc.

GROUP NO. 158.—Musical compositions, national airs, etc. (never came), guitars and baudores made of fine woods.

DEPARTMENT OF ETHNOLOGY.

The archæological exhibit displayed by Costa Rica in a space of one thousand feet square in the Anthropological building was of high merit, scientifically, and of great actual value. It was noticeable at a glance that the three thousand exhibits composing it were all originals, not a single reproduction being found among them.

Apart from the merits of their antiquity, an antiquity originating from dates anterior to the discovery of America, it may be said that the Costa Rican archæology is the link connecting the ancient specimens found in the other states of Central America and the discoveries made in South America. In this respect, the Costa Rican archæology presents well-defined traces of two distinct civilizations, one descending from the north by the Pacific coast, and the other emigrating in an entirely opposite direction, from south to north, following the



THE COSTA RICA SECTION AT THE ANTHROPOLOGICAL BUILDING, LOOKING NORTH.

temperate plains on the Atlantic side. The first is typified by the ancient people called Chorotega, and the latter by the Guetares.

With very rare exceptions, a continuous series of antiquities can be established along the Pacific, from the southern part of Costa Rica up to the northeastern portion of Nicaragua, Nicoya being here one of the principal centers of the Chorotegan civilization.

On the western side of the country, from Chiriquí up to the River of San Juan de Nicaragua, a similar distribution is noticeable, the only difference being that there the civilization of the Guetares seems to have spread out toward the interior of the country, following always the valleys alongside of the Reventazon River, up to the central plateau, where it comes in contact with the Chorotegas, near the Herradura volcano on the Pacific coast.

This is what these 3,000 archæological specimens exhibited by Costa Rica showed, according to Señor Alfaro, Commissioner of Archæology. All and each one of them are perfectly well identified, as absolutely all have been excavated from ancient tombs in certain localities, a work in which many private individuals at first, and lately the National Museum, and even the government directly, have spent thousands and thousands of dollars.

The typical tombs wherein these specimens of antiquity were found, are brought to light by large oil paintings, reproductions of the original photographs taken at the time the excavations were made in several Indian burial grounds.

There was, among other paintings decorating this section, one of great historical value, representing the villa of the Cacique of Suerre in 1544, executed from the drawings of Jerome Benzoni, an Italian soldier, who, in the same year, followed Diego Gutierrez, in the expedition he undertook to conquer and pacify the Indians.

In the decoration of this Costa Rican section, one of the most important of the Anthropological Building, a refined taste was noticeable throughout, combined with careful order. Everything presented the seal of its indigenous antiquity. The doors, the frames of the pictures, and even the folders of the Columbian maps, show the handicraft of the old American Indian, all forming an indigenous architecture, extremely interesting and instructive.

Coming now into the details of the component parts of this magnificent archæological exhibition, it may be considered as divided

into three large groups. The first is that of idols and gold jewels, 150 in number, among which there are many that show a stage of great improvement in the goldsmith's art, such, for instance, as the hammered patens, many of which are composed of three superimposed sheets, so made, undoubtedly, as to give them greater solidity. Other figures present samples of perfect smelting work, such as the devilkins and the small bells. Vestiges of the mold and traces of the hammer can be noticed. There are also many pieces of copper, and in these, the outside gilding is one of the curious problems that archæology has been as yet unable to solve.

The second group is composed of objects of volcanic stones or rocks, among which there are some table-like, in the shape of perforated fruit dishes, representing the work of many months, and perhaps of whole years. Besides these exhibits and *metates*, the grinding-stone for corn, there are knives and maces of porphyry, of practical use to the aborigines; human and animal figures, some above the natural size, sculptured, if this term can be used, by the Indians, all forming an integral part of the exhibition. The ornaments of jade, a green stone highly appreciated among the natives of America as well as among Eastern Asiatics, and the origin of which, during many years, has been attributed to the latter, are also worthy of special notice.

The third and most numerous group is composed of earthenware utensils, presenting an immense variety as to their forms and sizes, some of such remarkable artistic taste as to have deserved the praises of the historians and chroniclers of the period of the Conquest. Among others, the eminent historian Oviedo, referring to the Indians inhabiting the islands of the Gulf of Nicoya, wrote as follows:

In the island of Chira, plates and dishes, and also jugs, jars and other kinds of vessels are manufactured; all are very elaborate, and as fine as the best black velvet, and as sparkling as a very well-polished jet. And I brought along with me some pieces of said crockery to this city of Santo Domingo, of the Hispaniola Island, which, so far as their beauty is concerned, might be presented to a prince. And of the size and shape that the Indians are ordered to make them, so they do make them.

As to its pecuniary value, the archæological exhibition of Costa Rica has been appraised at \$50,000. But these precious relics of the primitive inhabitants of the country would never be sold for any

amount of money, as they constitute a treasure, highly valuable, each object representing, as it does, a part of the unwritten history of important races that are no more.

The collections, arranged by the same commissioner of archæology, Señor Don Anastasio Alfaro, director of the National Museum of Costa Rica, to whom we are indebted for this information, were exhibited last year, 1892, in Madrid, Spain, and they there obtained as awards six first-class medals. Señor Alfaro was also presented with honorable decorations.

EXPENSES, EXHIBITORS, JUDGES, AWARDS.

The expenditures of the exhibition in the Costa Rican Pavilion, including the cost of the building, service and transportation, exceeded....	\$100,000
And the installation of the section of archæology, at the Anthropological Building, service and transportation included, cost.....	10,000
Total amount	\$110,000

All the expenses were defrayed by the government, both on account of the character of the exhibition, consisting, as we have seen, mainly of natural products, and the desire to encourage the greatest possible number of individual exhibitors. The circumstances already referred to, namely the impending danger of cholera, and the consequent uncertainty as to the possibility of holding the Exposition at all, made the total number of exhibitors much smaller than it would otherwise have been.

According to the official catalogue of the World's Columbian Exposition, the number of the Costa Rican exhibitors was 363. Apart from the government, however, the number of individual exhibitors was, in fact, only 141, some of the exhibitors being represented in several different groups.

Of all the departments already mentioned, it is only in those of agriculture and ethnology that Costa Rica had judges of awards. They were, respectively, Señor Don Joaquín B. Calvo and Señor Don Manuel M. Peralta, who were indicated for the positions by the government of their country. Mr. Calvo was assigned to group No. 8, the most laborious of the Department of Agriculture. The Department of Ethnology was not divided into groups.

The following are the awards obtained by the exhibitors from Costa Rica:

DEPARTMENT OF AGRICULTURE.

GROUP NO. 1.

Cantón de Escazu,	San José,	Wheat.
Cantón de Santo Domingo,	Heredia,	Wheat.
Cantón de Paraiso,	Cartago,	Wheat.
Cartago,	Cartago,	Barley.
Zarcero,	Alajuela,	Barley.
San Pedro Calabaza,	Alajuela,	Indian Corn.
Valle de San Carlos,	Alajuela,	Rice.
Turrucares,	Alajuela,	Rice.
Piedras Negras,	San José,	Rice.

GROUP NO. 3.

Federico Tinoco,	Alajuelita,	Cane Sugar, Verbena.
Santa Ana,	Cantón de Mora,	Concrete Molasses,
Pio J. Fernandez,	Grecia,	Cane Sugar.
Ricardo Pfau,	San Pedro del	Honey Exotic.
	Mojón,	

GROUP NO. 4.

Provincia de Cartago,	Costa Rica,	Vegetables.
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GROUP NO. 5.

Cantón de Liberia,	Guanacaste,	Beans.
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GROUP NO. 8.

Francisco Peralta,	San José,	Coffee.
Tournon & Co.,	San José,	Coffee.
San Pedro del Mojón,	San José,	Coffee.
Narciso Esquivel,	San José,	Coffee.
Cantón de Tres Rios,	Cartago,	Coffee.
Cantón de Aserri,	San José,	Coffee.
Gregorio C. Quesada,	Palmares,	Coffee.
J. M. R.,	Palmares,	Coffee.
Rafael M. Nora,	Palmares,	Coffee.
J. G. L.,	Palmares,	Coffee.
J. J. Morera,	Palmares,	Coffee.

Felix Vargas,	Palmares,	Coffee.
J. M. Rodriguez,	Palmares,	Coffee.
C. H. S. Taras,	San Nicolas,	Coffee.
L. Robles,	Navarro,	Coffee.
J. H.,	Cartago,	Coffee.
P. A. Badilla,	Heredia,	Coffee.
J. R. R. Troyo & Co.,	Cartago,	Coffee.
José Hidalgo,	Naranjo,	Coffee.
Alberto Saenz,	Heredia,	Coffee.
Municipio Naranjo,	Naranjo,	Coffee.
J. M. Solera,	Heredia,	Coffee.
Antonio Vargas,	Grecia,	Coffee.
David Guzmán,	Cachi,	Coffee.
Distrito de Orosí,	Cartago,	Coffee.
Cantón de Santo Domingo,	Heredia,	Coffee.
Fernando García,	Cartago,	Coffee.
N. Corrales,	Naranjo,	Coffee.
Sa tiago Alvarado,	San José,	Coffee.
Manuel Sandoval,	Alajuela,	Coffee.
Otto von Schroter,	San José,	Coffee.
A. and F. Gallardo,	San José,	Coffee.
Silverio Quiroz,	San Ramón,	Coffee.
Jesús Cruz,	San Ramón,	Coffee.
Juan Dent,	El Mojón,	Coffee.
Jesús Alfaro,	San Vincente,	Coffee.
Federico Tinoco,	La Verbena,	Coffee.
A. E. Jimenez,	La Uruca,	Coffee.
Ricardo Montealegre,	Las Pavas,	Coffee.
Virginia B. de Jimenez,	La Uruca,	Coffee.
Emanuel Jimenez,	La Uruca,	Coffee.
José Quiroz,	San Juan,	Coffee.
Teodoro H. Mangel,	San José,	Coffee.
Francisco Orlich,	San Ramón,	Coffee.
Edua do Sell,	San Ramón,	Coffee.
Fabian Esquivel,	San José,	Coffee.
Teodosio Castro,	San José,	Coffee.
José A. Coronado,	San José,	Coffee.
Juan Jenkins,	Atenas,	Coffee.
Barrio de Guadalupe,	San José,	Coffee.
Juan Vte. Acosta,	Grecia,	Coffee.
Ramón N. Gonzales,	Palmares,	Coffee.
Manuel Zamora,	Heredia,	Coffee.
José Zamora,	San Ramón,	Coffee.
Rafael Canas,	Matina,	Cocoa.

GROUP NO. 9.

Cantón de Paraiso,	Cartago,	Collection of Fibers.
Cantón de Liberia,	Guanacaste,	Agave Fibers.
Región de Talamanca,	Talamanca,	Carludovica Palmata.

GROUP NO. 10.

San Carlos,	San Carlos,	Thermal Water.
Province of Cartago,	Costa Rica,	Thermal Water of San Francisco.
Cantón de Escasu,	San José,	Sulphur Water of Santa Ana.
Volcan Miravalles,	Miravalles,	Mineral Water of Rosa Verde.

GROUP NO. 11.

Dr. David J. Guzmán,	San José,	Whisky.
Fábrica Nacional de Licores,	San José,	Cordial, Rum and Cognac.

GROUP NO. 12.

B. Felice & Co.,	San José,	Black Beer.
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GROUP NO. 16.

Augusto Gallardo,	San José,	Coffee Machinery.
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GROUP NO. 17.

Government of Costa Rica,	San José,	Skins of wild animals tanned and dried.
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GROUP NO. 18.

City of San Jose,	San José,	Oils (animal and vegetable).
Fabrica del Aguila,	San José,	Stearine Candles of El Aguila.
José Velazquez,	San José,	Stearine Candles of La José-fina.
Government of Costa Rica,	San José,	Collection of medicinal plants.
Government of Costa Rica,	San José,	Collection of oils.

FORESTRY, FOREST PRODUCTS.

GROUP NO. 19.

San Carlos,	San Carlos,	Collections of coloring plants and barks.
Cantón de Liberia,	Guanacaste,	Collections of gums and resins.
Cantón de Nicoya,	Guanacaste,	Collections of gums and resins.
Valle de San Carlos,	Alejuela,	Collections of gums and resins.
Cantón de Golfo Dulce,	Puntarenas,	Collections of gums and resins.

Cantón de Puriscal,	San José,	Collections of gums and resins.
Francisco Valverde,	Heredia,	Collection of hard and ornamental woods.
Miguel Pugnot,	San José,	Mosaic collection of ornamental woods.
Government of Costa Rica,	San José,	Collection of building cabinets and dye woods.

DEPARTMENT OF FLORICULTURE.

GROUP NO. 22.

Costa Rica Government,	San José,	Collection of plants.
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DEPARTMENT OF ANIMALS.

GROUP NO. 34.

Museo Nacional de Costa Rica,	San José,	Collection of birds.
Abelardo Borges,	Alajuela,	Butterflies of Costa Rica, Album.

DEPARTMENT OF FISH AND FISHERIES.

GROUP NO. 37.

Government of Costa Rica,	San José,	Shells.
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GROUP NO. 38.

Government of Costa Rica,	San José,	Implements for fishing.
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DEPARTMENT OF MINES AND MINING.

GROUP NO. 42.

Mina Gaudilar,	Puntarenas,	Auriferous quartz from Gaudilar.
Campania Monte Aguacate,	Alajuela,	Gold and Silver Ores.
Government of Costa Rica,	San José,	Collection of 74 Mineral Ores.

GROUP NO. 44.

Government of Costa Rica,	San José,	Building, Stone, Marble, Serpentine, etc.
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DEPARTMENT OF TRANSPORTATION.

GROUP NO. 83.

Santiago Calvo,	San José,	Saddle.
Cantón de Bagaces,	Guanacaste,	Horse Hair Halters, etc.
Provincia de Cartago,	Cartago,	Saddle bags made of fiber.

DEPARTMENT OF MANUFACTURES.

GROUP NO. 87.

José J. Jimenez,	San José,	Drugs and other preparations.
Carlos D. Brenes,	San José,	Drugs and other preparations.
León H. Santos,	San José,	Drugs and other preparations.
José F. Tristan,	San José,	Drugs and other preparations.
Macial Alpizar,	San José,	Drugs and other preparations.
José M. Ugalde,	San José,	Drugs and other preparations.
Enrique Iglesias,	San José,	Drugs and other preparations.
D. J. Guzmán,	San José,	Drugs and other preparations.
Dr. G. Michaud,	San José,	Chemical products.

GROUP NO. 96.

Francisco Valverde,	Heredia,	Several samples of carved wood.
G. & B. Quesada,	San José,	Silver shovel used in the inauguration of the Atlantic Railroad of Costa Rica.

GROUP NO. 98.

Andres del Valle,	San José,	Gold ornaments for the person.
José Angulo,	Puntarenas,	Gold ornaments for the person.
Julio del Valle,	Cartago,	Gold ornaments for the person.
Ramón Ortiz,	San José,	Gold ornaments for the person.
S. Federici,	La Union,	Ornaments.
Antonio Aguilar,	Puntarenas,	Gold covered ornaments.
Doña Ines Mencía,	Puntarenas,	Tortoise shells.
José Angulo,	Puntarenas,	Gold covered ornaments.

GROUP NO. 100.

Federico Velarde,	Heredia,	Silk Shawls.
Fábrica Herediana,	Heredia,	Silk Shawls.

GROUP NO. 106.

Elisa F. de Duran,	San José,	Embroidered handkerchiefs.
Catalina Fournier,	San José,	Embroidered portraits.

GROUP NO. 118.

Foundry of San José,	San José,	Wrought Iron, Artistic Forging.
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DEPARTMENT OF LIBERAL ARTS.

GROUPS NOS. 149 AND 150.

Joaquín B. Calvo,	San José,	Geography, Statistics and History.
Inspector General of Public Education,	San José,	Statistics and other data.

Department of Education,	San José,	Photographs.
Museo Nacional,	San José,	Annals del Museo Nacional.
Ricardo Fernandez,	San José,	History of Costa Rica, etc.
Juan F. Ferraz,	San José,	Collection of Mexican Words.
Government of Costa Rica,	San José,	Pamphlets.
Vincente Lines,	San José,	Almanacs.
Imprenta Nacional,	San José,	Official Publications.
Dirección de Estadística,	San José,	Census Reports of Republic of Costa Rica.
Dirección de Estadística,	San José,	Census of Costa Rica, 1892.
Lorenzo Montufar,	Guatemala,	Walker in Central America.
Manuel M. Peralta,	Madrid, Spain,	Books, Publications, Atlas, Maps.

GROUP NO. 151.

Rudd & Paynter,	San José,	Photographs.
E. Fradin,	San José,	Hydrographic Surveying.
Francisco Valiente,	San José,	Photographs.

GROUP NO. 153.

Government of Costa Rica,	San José,	Postage stamps, coins, etc.
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GROUP NO. 158.

Maximo Morales,	San José,	Mandolin, Ornamental Woods.
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DEPARTMENT OF ETHNOLOGY.

Julio de Arellano,	San José,	Musical instruments made of clay.
Anastasio Alfaro,	San José,	Catalogue of Archæological Collection at Madrid, 1892.
Dolores Pacheco de Troyo,	Cartago,	Grinding stone and stone statues from ancient graves.
Museo Nacional de Costa Rica,	San José,	Gold, idols, jewels, ornaments found in ancient graves, household utensils, etc.
Right Rev. Bishop Bernardo A. Thiel,	San José,	Household utensils of aborigines, etc.
Francisco Montero Barrantes,	San José,	History and geography.
Ministerio de Fomento,	San José,	Paintings, maps of Costa Rica, etc.

RECAPITULATION.

Number of exhibitors, according to the Official Catalogue..... 363

This number is represented as follows—

By the government of Costa Rica.....	205
By individual exhibitors.....	158

Total	363
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Individual exhibitors.....	141
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Represented in various groups.....	17
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Total	158
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Number of awards 160

These awards were made as follows—

To the government of Costa Rica.....	56
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To individual exhibitors.....	104
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Total	160
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II.

RAILWAYS OF SOUTH AMERICA.

The "Treatise on the South American Railways and the Great International Lines," prepared by the ministry of public works, Uruguay, and published at Montevideo, 1893, supplies a mass of valuable information. Great credit is due the government of Uruguay for undertaking so elaborate and exhaustive a work, which was awarded three medals at the World's Fair, Chicago. The author, Señor Juan José Castro, has collected the latest information and statistics of the workings of South American railways, and also of enterprises either in process of development or merely projected. A synopsis of this book of over 650 pages has been prepared and is given below.

The Bureau is requested by Señor Prudencio de Murguiondo, consul-general of Uruguay, at whose instance this synopsis has been prepared, to state that he will furnish copies of the work to those specially interested, upon application to him at 309 East North avenue, Baltimore, Md.

Señor Castro begins by calling attention to two great projects which may be said to dominate the railroad development of South America. These are the proposed Intercontinental Railway and the South American Interoceanic Railway. The object of the first-named line is to establish direct communication between North and South America from Canada to the River Plate and Chile. The surveys for this purpose have been going on for some time under the direction of the International Railway Commission, with headquarters in Washington, D. C. The second, or Interoceanic Line, is intended to shorten the time required for communication between the Pacific Ocean, the River Plate and Brazil and the European continent, and to open up new facilities for commerce between the countries through whose territory it will run

With reference to the Interoceanic Railway, it may be said that the project is one that is actually in process of consummation. The construction of that portion of the Transandine Line traversing the Chilean Republic is almost finished, as is also that in the Argentine territory, but there is considerable work still required to make the connection. For the section running through the Republic of Uruguay, the concession is granted, and the surveys have been completed. The survey for the Brazilian portion, from Pernambuco to San Luis, has been partly made.

Señor Castro's book treats of the following railway systems:

- I. Railways of Uruguay.
 - II. Railways of the Argentine Republic.
 - III. Railways of Brazil.
 - IV. Railways of Chile.
 - V. Railways of Paraguay.
 - VI. Railways of Bolivia.
 - VII. Railways of Peru.
 - VIII. Intercontinental Lines.
 - IX. Interoceanic Lines.
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URUGUAY.

With reference to Uruguay, Señor Castro expresses the opinion that the importance of that country will in the future be much increased "as a necessary element for rapid and cheap communication with the countries situated beyond the vast Plate district." He thinks that the Uruguayan railways, from their general direction, will be of great international importance as a means to this end. The lines which radiate from Montevideo to the river Uruguay will spread across the Argentine system in order to reach Bolivia and Peru; by the line to Rivera, the shortest route will be found to Asuncion, to the eastern district of Bolivia, and to the proposed Intercontinental line. The lines which go toward Yaguaron and Lake Merim will shorten the time necessary for communication between Rio Grande, Pelotas, and Porto Alegre; lastly, the transverse line between Colonia and San Luis, as a section of the Interoceanic line from Recife to Valparaiso, will communicate on the one side

between the Argentine Republic and Chile, and on the other between the States of Rio Grande do Sul, Santa Catharina, Paraná, Sao Paulo, Minas Geraes, Bahia and Pernambuco, which will make this line of immense importance to the system to which it belongs.

According to a law of 1884, the lines which constitute the Uruguayan railway system are the following:

Central, Northeastern, Eastern, Western, Midland, Northwestern, Northern

The first four, which are the principal trunk lines, start from Montevideo and terminate, respectively, in Rivera, Artigas, Port Cebollati of Lake Merim, and Fray Bentos; the last three form the extensions from Paso de los Toros to Paysandú and Salto, from Salto to Santa Rosa, and from Isla de Cabellos to San Eugenio.

But, however, these lines, whose initial point is Montevideo, and which separate more and more from each other the further they get from the capital, were not in accord for the want of means of intercommunication, as for this purpose it was necessary to come to the converging point, unnecessarily running over long distances.

Besides, the general railway outline left a space of 400 kilometers on the Brazilian frontier, between Rivera and Artigas, without any direct communication with the capital.

Understanding the necessity for intercommunication between the trunk lines that run out of Montevideo and of a line to a middle point on the frontier between Artigas and Rivera, the executive power * * * published the law dictated by the legislative body which granted the concession for the Interior of Uruguay Railway. This railway starts from the port of Colonia, opposite Buenos Aires and La Plata and runs to San Luis on the Brazilian frontier, forming junctions with the Western, Central and Northeastern lines; with the first named at El Perdido, with the second at Durazno, and with the third at Cerro Chato (Puntas del Yi). With this line, the general system of railways, of a uniform gauge of 1.44 m. between the rails, is complete.

The above system was adopted in accordance with the report by a committee of engineers which was appointed in 1872 to determine the trunk railway lines, which, starting from Montevideo, should cross the country in various directions and furnish rapid communication between the interior of the country, the capital and the Brazilian and Argentine frontiers, while forming at the same time a well combined plan of defense. The following statements will show the length in kilometers (one kilometer equals .6214 of a mile) of the railways of the Uruguayan system constructed, in course of construction, surveyed, and being surveyed, as also the capital authorized, the capital in-

vested in the lines, the guaranteed capital, the amount of the guarantees, the length of the system when completed, and the capital it will represent:

Railways.	Open, Kilo- meters.	Extension in Kilometers.			
		In con- struc- tion.	Sur- veyed.	Pro- jected.	Total.
Central Uruguay (Montevideo to Paso de los Toros).....	272 880	.....	.....	.....	.....
Central Uruguay Northern Extension (Paso de los Toros to Rivera).	293.700	.....	.....	.....	.....
Branches of Central Uruguay:					
(a) Veinte y cinco Agosto to San José.....	33.720	.....	.....	.....	.....
(b) Sayago to Treinta y Tres...	8.000	.....	.....	.....	.....
(c) Paso de los Toros to Pineyruas saldero	1.000	.....	.....	.....	609.300
Montevideo to Minas.....	122.615	.....	.....	.....	122.615
Northeast Uruguay Railways:					
(a) Toledo to Nico Perez	206.200	.....	.....	.....	.....
(b) Nico Perez to Melo and Artigas.....	.....	.....	.....	305.000	.....
(c) Branch to Treinta y Tres...	.....	.....	.....	70.000	581.200
Uruguay Great Eastern Railways:					
(a) Olmos to Solis Chico.....	30.000	.....	.....	.....	.....
(b) Solis Chico to Maldonado...	.....	83.473	.....	.....	.....
(c) Maldonado to Laguna Merin.....	.....	.....	306.000	.....	419.463
Midland Uruguay Railway (Paso de los Toros to Paysandu and Salto).....	317.775	.....	.....	.....	317.755
Northwest Uruguay Railways (Salto to Santa Rosa).....	178.800	.....	.....	.....	178.800
Uruguay Northern Railway (Isla Cabellos to San Eugenio)	114.200	.....	.....	.....	114.200
Northern Railway (Montevideo to Barra Santa Lucia).	23.000	.....	.....	.....	23.000
Uruguay Western Railway (Montevideo to Rosario and Colonia) .....	.....	223.883	.....	.....	.....
Rosario to Mercedes and Fray Bentos.....	.....	.....	.....	194.000	.....
Branch from Perdido to Carmelo and Palmira.....	.....	.....	.....	115.000	.....
Branch to Dolores.....	.....	.....	.....	30.000	562.883

Railways.	Open, Kilo- meters.	Extension in Kilometers.			
		In con- struc- tion.	Sur- veyed.	Pro- jected.	Total.
Uruguay interior railways: Col- onia to San Luis (Brazilian frontier), passing through Perdido, Trinidad and Du- razno .....	.....	.....	580.891	.....	.....
Branch to Cerro Chato.....	.....	.....	36.731	.....	617.622
Loop line from Sauce Port to Rosario and San José (Lacaze concession) .....	.....	.....	86.000	.....	86.000
	1,601.840	*307.346	1,009.622	714.000	3,632.808

* The construction of these lines is entirely suspended.

Capital invested in the Railways on January 1, 1893.

Railways.	Authorized capital.	Amount of capital invested.*
Central Uruguay and branches.....	£2,650,000	\$12,893,416
Central Uruguay, northern extension.....	1,666,666	7,821,803
Northeastern Uruguay (Toledo to Nico Perez).....	1,666,666	5,635,746
Montevideo to Minas	800,000	3,892,350
Uruguay Great Eastern (Olmos to Maldonado and Lake Merim)†.....	.....	750,000
Midland Uruguay (Paso de los Toros to Salto).....	.....	7,711,722
Northwestern Uruguay (Salto to Santa Rosa)	1,410,000	6,860,370
Uruguay Northern (Isla Cabellos to San Eugenio).....	570,775	2,777,071
Northern (Montevideo to Barra de Santa Lucia).....	.....	671,430
		49,013,908

* One hundred dollars Uruguay gold are equivalent to \$103.52 United States currency.

† The capital of the Great Eastern, Midland and Uruguay Northern lines has been calculated on the kilometric cost as fixed by the laws of concession for the payment of the guarantee.

Railways opened to traffic with Government Guarantee.

	Length in kilo- meters.	Kilo- metric cost.	Amount of capital guaranteed Jan. 1, '93.	Interest guaran- teed.	Total cost of guaran- teed ser- vice.
				Per cent.	
Central Uruguay, Northern extension: Paso de los Toros de Rivera.....	293,700	\$24,327	\$7,144,840	3½	\$250,070
Northeastern Uruguay: Toledo to Nico Perez..	206,200	24,327	5,016,227	3½	175,567
Montevideo to Minas	88,317	24,327	2,148,487	3½	75,197
Midland Uruguay: Paso de los Toros to Pay- sandu and Salto.....	317,775	24,327	7,631,512	3½	267,103
Northwestern Uruguay: Salto to Santa Rosa...	80,257	24,327	1,952,412	3½	€8,334
Uruguay: Northern Isla Cabellos a San Eugenio	114,200	24,327	2,778,143	3½	97,235
	1,100,419	.....	26,671,621	.....	933,506

There were, on January 1, 1893, 1,334 kilometers 747 meters opened to traffic with a government guarantee of 3½ per cent on a capital of \$27,505,989.

ARGENTINE REPUBLIC.

In the chapter which treats especially of the railways of the Argentine Republic, Señor Castro says:

In considering the railways of the Argentine Republic opened to traffic, in construction, or projected, there are noticeable in the whole network four great systems that run out of Buenos Aires:

(1) The Buenos Aires Great Southern Railway, with a total length of 1,878 kilometers, the main line running to the port of Bahia Blanca, distant 717 kilometers, from whence at a future date it is intended to be continued across the Rio Negro, Chubut, and Santa Cruz territories.

(2) The Buenos Aires and Pacific Railway to Valparaiso, of 1,221 kilometers, to the Argentine-Chilean frontier, this line forming a section of the Interoceanic line from the port of Recife (Pernambuco) to the port of Valparaiso.

(3) The Buenos Aires and Rosairo Railway running to Tucuman, and thence, in combination with the Central Northern Prolongation Railway, to Jujuy, distant 1,507 kilometers from the capital.

The Central Northern Prolongation will be continued to the Bolivian frontier and will thus form a principal line in the combination proposed with the railways of that country.

(4) The Santa Fé, Reconquista and Formosa route, intended to communicate with Asuncion (Paraguay), and of the total length of 1,216 kilometers to Formosa.

There are already constructed some 779 kilometers as far as Reconquista.

These four lines, by the districts which they traverse and the towns which they serve, form the great trunk lines of the Argentine railway system that connects with the capital, and they belong :

- (1) To the Buenos Aires Great Southern Railway Company (Limited.)
- (2) In three sections :
 - (a) Buenos Aires to Villa Mercedes, to the Buenos Aires and Pacific Railway Company (Limited).
 - (b) Villa Mercedes to Mendoza, to the Argentine Great Western Railway Company (Limited).
 - (c) Mendoza to the Chilean frontier, to the Transandine Railway Company.
- (3) In two sections :
 - (a) Buenos Aires to Tucuman, to the Buenos Aires and Rosario Railway Company (Limited).
 - (b) Tucuman to Jujuy, to the Nation.
- (4) In three sections, of which the two constructed already belong :
 - (a) From Buenos Aires to Santa Fé, to the Buenos Aires and Rosario Railway Company (Limited).
 - (b) Santa Fé to Reconquista, to the Provincial Government of Santa Fé.
 - (c) Reconquista to Tucuman, to a separate company that will be formed to construct this line.

RAILWAY ADVANCEMENT.

The first railway established in the Argentine Republic was the Western of Buenos Aires, the first section of which, ten kilometers in length, was opened to public traffic in 1857. The rate of railway development in the Argentine Republic annually has been as follows :

Kilometers.		Kilometers.	
1857.....	10	1880	2,315
1860.....	39	1885	4,541
1865.....	213	1890	9,255
1870.....	732	1892	12,990
1875.....	1,384		

General Resumé.

	Kilometers.
Railways open to public service.....	12,990.200
Railways, construction of which is being actively carried on.....	527.900
Railways, construction of which is partly stopped.....	500.400
Railways, construction of which is completely stopped.....	3,698.568
Railways surveyed.....	4,088.600
Railways under survey.....	61.000
Railways to be surveyed.....	7,793.700
Total	29,660.368

*Capital represented by the railways of the Argentine Republic in the year 1892.**

Andine	\$4,123,608
East Argentine	5,051,573
Buenos Aires and Rosario	41,185,753
Buenos Aires and Pacifico	16,251,818
Bahia Blanca and Northwestern	4,269,587
Buenos Aires and Ensenada	10,097,243
Central Argentine	49,172,613
Central Córdoba	4,824,932
Central Córdoba (Central Northern Section)	20,262,446
Central Entre-Rios	13,293,613
Central Northern	13,623,964
Central Chubut	964,878
Chumbicha to Catamarca	2,219,220
Dean Funes to Chilecito	11,804,490
Great West Argentine	18,819,760
Great Southern of Santa Fé and Córdoba	4,363,434
Northwest Argentine (Tucuman to La Madrid)	5,106,720
Northwest Argentine (Villa Mercedes to Rioja)	1,874,377
Northeast Argentine	30,150,521
Western of Santa Fé	3,859,513
Western of Buenos Aires	30,322,423
First Entre-Rios	148,435
Provincial of Santa Fé	17,751,157
Southern	70,397,529
San Cristobal to Tucuman	7,439,666
Transandine	4,891,661
Villa Maria and Rufino	5,524,199

Total 397,684,593

The \$397,684,593 which represent the total of the Argentine railways are distributed as follows:

Railways belonging to the nation	\$31,919,719
Railways guaranteed by the nation	80,559,519
Railways belonging to provinces	18,233,597
Railways of private property	266,971,758

Total 397,684,593

The gross receipts of all the railways to January 1, 1891, amounted to \$55,417,555, as follows:

National railways	\$972,175
Provincial railways	2,964,075
Railways guaranteed by the nation	8,430,243
Private railways	43,051,062

Total 55,417,555

*One hundred dollars (U. S. A.) are equal to \$103.64, Argentine gold.

The working expenses of all the lines to the same date amounted to \$37,852,-768, as follows:

National railways.....	\$1,475,974
Provincial railways.....	2,563,940
Railways guaranteed by the nation.....	8,658,477
Private railways.....	25,154,377
Total	37,852,768

The profits and losses in the year 1891 amounted to \$19,028,833, distributed as follows:

	Profits.	Losses.
National railways.....	\$503,779	
Provincial railways.....	400,135	
Guaranteed railways		\$228,234
Private railways.....	17,896,685	
Total.....	18,800,599	228,234

According to the office of accountancy and control of the general direction of railways, the guaranteed companies, in the year 1891, owed the government for guaranties considered to be unduly paid the sum of \$4,087,389, distributed among the companies as follows:

Buenos Aires and Pacific.....	\$1,584,672
Central Córdoba (Central Northern section).....	1,095,503
Great West Argentine	1,318,137
Transandine.	15,220
Northeast Argentine.....	34,098
San Cristobal to Tucuman.....	2,081
Northwest Argentine.....	2,813
Villa Maria and Rufino.....	10,789
Bahia Blanca and Northwestern	24,076
Total	4,087,389

BRAZIL.

The railways of Brazil are divided by Señor Castro into three groups, namely: The Northern, the Central, and the Southern. The first is laid in the States of Rio Grande del Norte, Parahiba, Pernambuco, Alagoas, Sergipe and Bahia; the second in the States of Minas

Geraes, Rio Janeiro and São Paulo; and the third in the State of Rio Grande do Sul. "In each one of these nuclei of railway net works," says Señor Castro, "the lines generally are of local importance and of one-meter gauge, although, however, some by the conditions and directions are destined to serve the general public traffic, among which we might cite the line from Recife to São Francisco in the future it would have when incorporated with the Interoceanic line in the State of Pernambuco; the Central Brazilian railway; the Santos and Jundiahy railway; and the principal line of Mogyana in the extensions proposed connecting with the lines running through the States of Goyaz and Matto Grosso as far as the Bolivian frontier."

Among the lines projected which may be regarded as international in character, Señor Castro mentions that of Santos; that from São Francisco to the Paraguayan frontier; and that from Recife to Valparaiso "which ceases to be a line of mere Brazilian importance when considered as of South American international character."

In 1852, the Brazilian government adopted a law providing guarantees and inducements for railway construction. At the present time, there are in Brazil 11,043 kilometers of railway in working order; 5,402 under construction; 5,175 surveyed; 4,414 being surveyed, and 13,826 yet to be surveyed.

"In view of the enormous size of Brazil," remarks Señor Castro, "and of its extensive coasts being provided with excellent ports, the first necessity was to open to each district its most natural and shortest exit toward the sea, without considering that at some more or less distant date these arteries might become united and form one single network; in this manner were established the three systems which we have indicated in order to meet the demands of the exporting and importing commerce of the interior of the country, affording an easy exit through its principal ports, which in the northern district are Pernambuco and Bahia; in the center district, Victoria, Rio de Janeiro and Santos, and in the southern, the mouth of the Rio Grande do Sul, its only exit to the Atlantic Ocean, and which is very badly qualified to serve the commerce of that state whose wants are chiefly supplied through the port of Montevideo and those of the River Uruguay (Salto and Concordia)."

"The population of Brazil, already some 15,500,000 souls, its enormous products and commerce, show the necessity for rapid and cheap

communication between its States and the interunion of these three independent systems of railways, and to gain this end, which will be of the greatest importance to Brazil, for many reasons, the public powers are allying themselves with private enterprise."

Señor Castro supplies the following table of Brazilian railways actually working in 1892:

	RAILWAYS.	LENGTH.
State—		Klms.
Baturité.....		197.6
Comocin—Sobral—Ypú.....		216.6
Central Pernambuco.....		72.1
Palmares to São Francisco.....		146.4
Paulo Affonso.....		115.9
Alagoinhas to São Francisco.....		322.0
Rio d'Ouro.....		83.0
S. Amaro-Jacú.....		36.0
Central Brazilian.....		725.0
Central Brazilian.....		394.0
P. Alegre to Uruguayana.....		377.0
Guaranteed by the State—		
Natal to Nova-Cruz.....		121.0
Conde d'Eu.....		141.0
Recife—Palmares.....		124.7
Recife—Limoeiro—Tinbauba.....		141.1
Ribeirão to Bonito.....		22.0
Maceió—Imperatriz.....		150.0
Bahia—Alagoinhas.....		123.3
Alagoinhas—Timbo.....		83.0
Central Bahia.....		315.0
Nazareth Santo Antonio.....		34.0
Nazareth Tramroad.....		42.0
Caravellas Philadelphia (1887).....		142.0
Itapemirim Alegre.....		70.0
Leopoldina.....		1,471.0
Minas and Rio.....		170.0
Western Minas.....		377.0
Juiz de Fora to Piau.....		61.0
S. Isabel of the Rio Preto.....		74.5
Rosendo-Areas.....		28.4
Central Macahé.....		44.0
Ribeirão to Bonito.....		32.0
Mogyana (main line, 1887).....		740.0
Bragantina.....		52.0

Sórocabana	376.0
Paranaguá—Curityba—Lapa	231.0
Thereza-Christina	116.0
Rio Grande to Bage.....	283.0
Quarahim to Itaqui.....	173.0
Unguaranteed—	
Recife—Caxangá	20.0
Macahé—Campos	96.0
Santo Antonio de Padua.....	92.7
Rio de Janeiro to Mage.....	88.0
Principe do G. Pará	91.7
Santos to Jundiahy	139.0
Ituana (1886).....	283.0
Paulista.....	242.0
Rio Claro.....	264.6

The most important of the Brazilian railway lines is the Central Brazilian railway which has become the artery for the great system of railway lines converging from right to left toward its own, "which," says Señor Castro, "makes it what the law of 1852 intended it to be, namely, the great factor in the development of the states of Rio de Janeiro, Minas Geraes and São Paulo."

CHILE.

Señor Castro gives a synopsis of the railroads of Chile for the year 1891, which shows the railroads opened to public service, as also those in construction up to that time. The state railways are divided into three sections as follows:

	Klms.
First. From Valparaiso north to the bank of the Mapocho, including the branches from Las Vegas to the Andes, and from Boron to the Port.	228
Second. From the Mapocho to the Talca station, including the branches from Tungay to Mercado, and from Tinguiririca to Palmilla.....	296
Third. From Talca to Victoria, including the Los Angeles, Traiguen and Talcahuano branches.....	582
Total	1106

The private railways are the following, commencing with the North :

	Kilms.
From the port of Arica to the city of Tacna	63
From the port of Pisagua to Tres Marias, ninety kilometers, and branches to Agua Santa and Puntunchara and sidings, together....	106
From the port of Iquiqui to Tres Marias, 109 kilometers, to Virginia thirty-one kilometers, branches to stores and sidings, total	194
From the port of Patillos to Salitreras del Sur	93
From the port of Mejillones del Sur to the Cerro Gordo mine.....	29
From the port of Antofogasta, via Salinas de Dorado, to the town of Calama, and thence toward the east in the direction of the borax deposits of Ascotan on the borders of Bolivia, into the interior of which country the line should continue for a few kilometers to the rich silver mine at Huanchaca.....	440
From the port of Taltal to Cachiyuyal or to Refresco	82
From the port of Caldera to Copiapo, branching out from thence to the Puquios mines, San Antonio de Apacheta, and to Chuarcillo or to Juan Godoy.....	242
From the port of Carrizal Bajo to Carrizal Alto, via Barranquilla and Canto del Agua, thirty-six kilometers, and from thence another forty-five kilometers eastward to the Cerro Blanco mine.....	81
From the port of Coquimbo to the city of la Serena y la Compania	15
From the same port to the city of Ovalle with a branch to Panulcillo.....	123
From the port of Serena to Elqui or to the town of Rivadavia, to the east of the city of Vicuña	78
From the port of Tongo to the Tamaya mine.....	55
From the port of Laraguete, in the bay of Arauco to the coal mines of Quilachauquin and Maquegua.....	40
From the city of Santiago to Pirque	21
	<hr/>
	1,662

There are also some other short railways which serve the coal mines of Coronel, Lota, Lebu, etc., and a tram or railway worked by animal power, six to eight kilometers long, between the port of San Antonio and Boca de Maipo.

In the cities of Santiago and Valparaiso, there are convenient tramways, of over sixty kilometers long in the first named and a little over ten in the second.

The same service has been established in the cities of Concepcion, Copiapo, Chillan, Rengo, Quillota, San Felipe, Santo Rosa, Serena, Talca, etc.

RAILWAYS IN CONSTRUCTION.

The following statement will give the name and length of the lines being constructed, and the gauge of each:

Name of Line.	Length.	Gauge.
	Klms.	M.
From Huasco to Vallenar.....	49.1	1.00
From Vilos to Illafel y Salamanca	120.0	1.00
From Calera to Ligua	71.5	1.00
From Santiago Melpilla	59.0	1.68
From Pelequin to Peumo.....	28.1	1.68
From Palmilla to Alcones.....	44.0	1.68
From Talca to Constitucion.....	84.6	1.00
From Parral to Cauquenes.....	49.4	1.68
From Coihue to Mulchen.....	41.4	1.68
From Victoria to Tolten.....	106.0	1.68
From Valdivia to Pichi-Rapuli.....	95.0	1.68
From Pichi-Ropulli to Osorno.....	70.0	1.68

Of the line from Santiago to Melipilla, the section between the former city and Chinihue, 48 kilometers long, is open to traffic, as is also the part as far as the river Cachapoal, 18 kilometers long, of the Pelequen-Peumo line.

PARAGUAY.

Railway construction in Paraguay, according to Señor Castro, was commenced in June, 1859. It was intended that the line beginning at Asuncion should terminate at Villa Rica. The first section was constructed under the direction of engineer Padison and reached to the Paraguari, a distance of 72 kilometers from Asuncion. The surveys for the second section were made by Messrs. Valpy and Burrel, and the works were about to be commenced when war broke out and temporarily prostrated the country. Until 1888, the work was entirely suspended. The government then annulled the concession that belonged to the private firm and ordered the continuation of the work. This was intrusted to Don Luis Patri, "one of the richest capitalists in Paraguay," and from that time, the work was pushed with great activity under the direction of the French engineer M. Gil Regnault, and the section as far as the station General Caballero, situated on the other side of Ibitury, has been opened to public traffic.

The government has resolved to sell the line, and an English company has recently taken it on condition of prolonging it to Vil

Encarnacion, situated on the banks of the Parana, on the southern boundary of the Republic. The line should be completed this year, 1894, and will establish communication with the Argentine railway in course of construction between Monte Caseros and Posadas. The line thus extended will place Paraguay in communication with the Argentine provinces of Corrientes and Entre Rios, as also with the port of Montevideo, via Concordia, Salto and Durazno. There still remains to be built, in order that the line may reach Encarnacion, a distance of 135 kilometers, which will give the road a total length of 387 kilometers.

The English Company which has undertaken the completion of the road is known as the Central Paraguay Railway Company. The National Congress has authorized other concessions for railways destined to cross the country in various directions.

The Central Paraguay Railway is regarded by Señor Castro as of great importance, likely to be in the future an element of quick communication between the River Plate and Paraguay, when the Argentine line to Posadas shall have been constructed, and the extension of the Central Uruguay Railway from Rivera to San Borja is carried out. It will also form a junction with the Intercontinental trunk line and will establish communication between Uruguay, the State of Rio Grande do Sul, Brazil, and part of the Argentine Republic and Bolivia and Peru.

BOLIVIA.

The railway system of Bolivia, according to Señor Castro, is as yet mostly projected, only one line having been constructed up to the present. This establishes communication between the interior of the country and the port of Antofagasta on the Pacific. It runs across the territory of Bolivia from Ascotan, a point on the frontier of Chile, to Oruro, and is 923 kilometers long. For its construction, an economical type of road was adopted of .75 meter gauge, trains being able to travel without danger at a maximum velocity of fifty kilometers per hour. The construction of this line has been completed within a recent date, the line having been opened as far as Oruro on the 15th of May, 1890. The length of the railway from Uyuni to Oruro is 315 kilometers. The branch to Pulacayo and

Huanchaca, principally intended for the transport of metals belonging to the Huanchaca Company, does not belong to the public.

A number of concessions have been granted for the construction of railways in Bolivia, among them one from the present road to Colquechaca, to develop the mineral resources of that district; another for a road to connect the departments of Oruro and Cochabamba, intended to develop existing commercial relations between the central agricultural districts of the country and the fertile valleys of the department of Cochabamba, the length being about 200 kilometers; third, a branch road from Uyuni to Potosi, being from 225 to 230 kilometers in length; fourth, a road from the city of Cochabamba to the banks of the river Mamore, or one of its tributaries in the department of Beni, together with a concession of 100 square leagues of State lands, in alternate lots of ten leagues each, on both sides of the line, for the establishment of colonies and agricultural settlements; fifth, a grant to Perry Cutbill & Co. of London for the construction of a road in the eastern portion of the Republic; sixth, the right to construct railways and tramways from the banks of the Desaguadero and Lake Poopo to populated centers and mining districts, granted to Juan L. Thorndike, and extended for twenty years from January 1, 1890; seventh, an extension of the line from Oruro to the city of La Paz, to complete the Bolivian Central Railway, and provide transportation to foreign markets by the Desaguadero and Mollendo to the north, and by Antofagasta to the south; eighth, a grant to the English company known as "The Peruvian Corporation, Limited," for the construction of a railway from La Paz to the Peruvian frontier, the concessionaires undertaking to make a junction between the line from La Paz to Desaguadero and the one from Puno to Mollendo.

From a report of one of the cabinet ministers of Bolivia, August 27, 1892, Señor Castro quotes as follows:

"In former reports I had the honor of pointing out to you the convenience of negotiating for the extension of the Argentine Central Northern Railway to the southern provinces of this Republic.

"Now that the Bolivian table land railway borders on the neighboring country, I must again make mention of that undertaking of such incalculable importance, both to the honorable members of Congress and to the government that initiated it.

"In the future destinies of the country, the realization of this stu-

pendous work will render our international relations closer, supporting them by ties of common interest, without the inconveniences attending the Magellan and Panama routes.

"The prolongation of the Plate lines by the Santa Catalina frontier to the point of bifurcation in Uyuni, crossing the province of Lipez, will realize, at no distant time, one of our greatest hopes.

"Now, notwithstanding our political disturbances, that the road is opened to this class of undertakings by the initiative taken by the Huanchaca Company of Bolivia, who subguaranteed the capital invested in the construction of the railway from Uyuni to Oruro, and once confidence is re-established in the promises of the government, we can reasonably look for a radical change in our financial condition.

"Those countries which, on account of their natural limits, are shut in and live almost completely isolated from the contiguous States, have no unity of ideas or interests with their neighbors, and do not understand any other life than that of a purely local existence. Every government can combat and overcome this inconvenience by opening easy roads of communication, by whose beneficent influence the hidden valley is brought into view, and enters into relations with the neighboring lands, and its inhabitants form part of one great family, from which, up to then, they had been separated. The iron roads and the electric telegraph will finish by triumphing over time and space, which in the Middle Ages were very powerful agents of the dismemberment of the land and of the want of unity in the government."

PERU.

"Among the States of the American Continent," says Señor Castro, "Peru has had to pay the highest contribution of all to carry out the construction of her railway system.

"In the railway system extending from the Pacific coast to the interior of the country, climbing the mountains of the Andes and crossing one of the most rugged districts in the world, the works have always had to be made in the face of the greatest difficulties.

"On June 30, 1850, Don Ramon Castillo laid the foundation stone of the first railway in South America, on the line from the port of

Callao to the city of Lima, opened to traffic on April 5, 1851, being fourteen kilometers in length.

“Following this, the line from Arica to Tacna was completed by Mr. Egan, and then those from Ica to Pisco and from Iquique to Noria ; but it was during the administration of Colonel Baltas, from 1868 to 1872, that the railway industry received its great impulse, the construction of nineteen lines being commenced that it was intended should extend 2,500 kilometers, and of which more than half were completed before the war of 1880, the consequences of which paralyzed these works, which were of solid progress to Peru.

“According to Engineer Bresson, the average cost of the Peruvian railways is, more or less, \$100,000 per kilometer, an enormously high figure, only explained by the railway system covering one of the most rugged districts in the world, and by the concessions, favors and special grants made to attract the capital required for such great works.

“Reviewing the Peruvian railway system, there are three lines which stand forth as of first class ; the first is the Transandine, running from Callao in the direction of Lima, Oroya and Cerro de Pasco ; the second establishes communication between the port of Mollendo and Arequipa, Juliaca, and Puno ; the third, starting from Juliaca, runs to Cuyco through Pucara, Santa Rosa, and Sicuani ; this line, from the direction it runs, being one day destined to be the Peruvian Central Railway, from which the whole railway system will branch off.”

Of these roads, the most noted is the Callao and Oroya railway, of which Señor Castro gives the following sketch :

“This line runs from the port of Callao to the Monserrate station in Lima. After a run of twelve kilometers, it climbs the mountains on the banks of the River Rinac until it reaches the San Pedro Mauna station, in kilometers 53.340, with minimum gradients of 3 per cent. From this point on, the rapid ascent is made with gradients of 3.85 per cent and 4.43 per cent, for which reason heavy engines are employed capable of overcoming these very heavy gradients.

“The station Cochaira is found in kilometer 75, Chicha in kilometer 160 and Oroya is reached in kilometer 209 from Callao. * *

“The engineer-in-chief of this important line was Don Enrique Meiggs. It is one of the most notable in the world. In a distance of 200 kilometers it rises to a height, not reached by any other railway, of 4,779 meters, Mont Blanc only being 4,809 meters high.

"With these extraordinary works, there would be opened to commerce and agriculture entirely virgin districts which, once placed in communication with the Pacific ports on one side and with those of the Amazon on the other, would have constituted new sources of wealth for Peru; but financial difficulties in that country have delayed the termination of the magnificent proposal of Meiggs.

"Engineer Bresson, in his work 'Bolivia,' edited in Paris in 1886, says: 'One of the curiosities of the Oroya railway is the Verrugas bridge, an immense viaduct crossing a torrent of 175 meters wide by means of an iron span supported by three pillars, one of which is 90 meters high or one and one-half times the height of the towers of Notre Dame in Paris.'

"The line of this singular railway runs nearly always on a gradient of .03m. or .04m. per meter; the level or straight stretches being the exception. Indeed, gradients and curves constitute the general condition of road that, from time to time climbing the zigzag or running through tunnels, comes out on imposing precipices terrible in their grandeur. Many times, the line appears like a cornice on the sides of the Andes—on one side the precipice, and on the other a perpendicular wall of rock towering above the aerial road."

The following is Señor Castro's statement of the railways of Peru, with distances:

NORTHERN SYSTEM.

	Kilms.
From the port of Paita to Puirá, the capital of the Department, passing through Colon, La Huaca and Sullano.....	96 000
From Puirá to Sechura, open as far as Catacaos.....	.....
From the port of Elen to Terrenafe, passing through Monsefu, Chiclayo and Lambayeque.....	43.492
Branch from Chiclayo to Patapo.....	24.901
From Lambayeque to Pimintel, of which there are constructed only....	25.000
From Pascamayo to Magdalena and Cajamarca.	179.000
From Salaverry to Trujillo	11.000
From Trujillo to Ascope	78.000
From Chimbote to Huaraz and Ramay, constructed as far as Suchunan.....	55.000

CENTRAL SYSTEM—1.435M. GAUGE.

From Callao to Lima, passing through Barranco and Miraflores.....	14.000
From Lima to La Magdalena del Mar.....	7.000
From Lima to Chancay, open as far as Ancon	33.000

From Callao, Lima, Oroya and Cerro de Pasco, line open as far as Oroya	209.000
From Pisco to Ica	74.000

SOUTHERN SYSTEM—1.435M. GAUGE.

From Mollendo to Arequipa.....	172.000
From Arequipa to Vincocay, Juliaca, and Puno.....	351.000
From Puno to Cuzco, open as far as Sicuani.....	200.000

Total	1,572.393
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“In the year 1886, the Peruvian Government contracted with a North American company for the prolongation, as far as Cerro del Pasco, of the railway from Callao to Oroya. The termination of this line will give a great industrial impetus to Peru. The working of the silver mines of the Cerro del Pasco, renowned for the abundance and good quality of the ore will be developed as they merit, in view of the immense values they represent.

“The extension of other railways has also been contracted, among which are: The Trujillo, Chimbote and Cuzco lines.”

III.

MINING EXPOSITION IN CHILE.

The Bureau of the American Republics has received through the Department of State the following dispatch from the Hon. James D. Porter, United States Minister to Chile :

“I am requested by the Sociedad Nacional de Minería to inform my countrymen interested in the subject, that the opening of the Chilean National Mining and Metallurgical Exposition—mentioned in my dispatches numbered 33, 34 and 42 has been postponed by decree of the Supreme Government until September next, the day to be fixed hereafter, and of which timely notice will be given.

“The postponement will not interfere in the meantime with the reception and care of the articles destined for the exhibition, as the society will receive from this time on and take charge of all such objects as may be sent by exhibitors.

“The postponement has been decided upon by the government at the instance of its diplomatic representatives in Europe, as well as of many of the Chilean mining and manufacturing industries. They think it would be impracticable for the European exhibitors to prepare and send their exhibits within the short interval intervening before the time as originally announced, and that a postponement will give opportunity for more thorough preparation by the government and the society.

“I suggest that the fact of postponement be given to the press by the Department for the benefit of all persons in the United States who purpose taking part as exhibitors or otherwise.”

Information as to the proposed exhibition was published by the Bureau of the American Republics shortly after the announcement last fall that it was to be held, and a brief statement of its character and purposes was given in the Bureau Bulletin for November, 1893, page 19.

The official program of the exhibition transmitted by Minister Porter, is as follows:

EXHIBITION OF MINING AND METTALLURGY.

An exhibition of mining and metallurgy will be opened in the Quinta Normal de Agricultura, Santiago, in the second fortnight of April, 1894 (since postponed to September, 1894.) The exact date of opening and closing will be made known opportunely by the minister of industry and public works.

The exhibition will be divided into the following sections:

FIRST SECTION—MOTIVE POWER.

- (a) Steam, petroleum and gas engines.
- (b) Pelton wheels or similar apparatuses for utilizing small quantities of water from a great height.

SECOND SECTION—ELECTRICITY.

- (a) Dynamos for transmission of mechanical force for lighting and for electrolysis.
- (b) Electromotors and electric winches.
- (c) Electric drills.
- (d) Pails for electrolysis and the materials employed in its preparation.
- (e) Pumps and special injectors to move electrolytes.

THIRD SECTION—MINING MACHINERY.

- (a) Winding machinery.
- (b) Air compressors.
- (c) Drills worked by compressed air.
- (d) Boring machines.
- (e) Mining pumps.
- (f) Tools and accessories used in mines: Ventilating apparatuses, life-saving apparatuses, lamps, etc.
- (g) Strong explosives for mining purposes.
- (h) Apparatuses for the conveyance and loading of minerals; Aerial tramways, portable railways, etc.

FOURTH SECTION—MECHANICAL PREPARATION OF MINERALS.

- (a) Crushing and pulverizing machines.
- (b) Concentrating machines—by means of air and by means of water.

FIFTH SECTION—METALLURGY.

- (a) Smelting, calcining and roasting furnaces.
- (b) Metallurgical and industrial treatment of copper, zinc, lead and tin.

- (c) Small installations for the hydrometallurgical treatment of copper.
- (d) Small installations for the treatment of gold ore by cyanide of potassium, by mercury, etc.
- (e) Methods of lixiviation.

SIXTH SECTION—CHEMICAL INDUSTRIES.

- (a) Manufacture of sulphuric acid, Barbier apparatuses, etc.
- (b) Apparatuses used in the extraction of nitrate, other salts and iodine.
- (c) Laboratory utensils and reagents.

SEVENTH SECTION—STATISTICS AND PLANS.

- (a) Scientific instruments used in mining.
- (b) Plans.
- (c) Models.
- (d) Catalogues.
- (e) Statistical data.

EIGHTH SECTION—MINING AND METALLURGICAL PRODUCTS.

- (a) Collections or samples of rocks, minerals, ornamental rocks, hard rocks, refractory materials, earths and clays, miscellaneous mineral products, native sulphur, rock salt, salt from salt springs.
- (b) Mineral and vegetable fuel, coals, residuums and agglomerates, asphalt, and asphaltic rocks, pitch, mineral tar, raw petroleum.
- (c) Ores in the rough; copper, lead, silver, zinc, etc.
- (d) Products obtained from ores in the rough.

CONDITIONS.

ART. III. Chileans and foreigners alike may take part in the Exhibition, and exhibitors will be required to submit to the regulations, which will be opportunely published.

ART. IV. The government will convey gratis to the Exhibition all articles comprised in the preceding classifications which it may be desired to exhibit.

The government will also pay the passage money by sea and land of the workmen and operatives whom exhibitors may bring out for the purpose of setting up and running the machinery and apparatuses they may exhibit.

ART. V. Exhibits from the time that they are entered at the custom-house will be considered as in private bond—that is to say, for the duties to which they are liable, twelve months' promissory notes must be signed, which will be canceled if within that period the said exhibits are reshipped for abroad. If not, the respective duties must be paid to the custom-house.

ART. VI. There will be three classes of awards, which will consist of first, second and third-class medals, which will be accompanied with diplomas signed by the minister of industry and public works, and by the president and secretary of the Sociedad Nacional de Minería (National Mining Society).

ART. VII. The organization of the Exhibition is confided to the directory of the Sociedad Nacional de Minería, which will be presided over by the minister of industry and public works, whenever this functionary attends its meetings.

ART. VIII. The directory of the Exhibition will draw up the regulations which may be necessary for the proper discharge of their duties, which must be submitted to the approval of the government before they are put in force.

SUPPLEMENTARY DECREE.

A supplementary decree provides that the Sociedad Nacional de Minería shall receive and take charge of the exhibits.

Applications for space by foreign exhibitors must be presented to the Chilean legations in Paris, London, Berlin, Washington, Lima, Rio Janeiro and La Paz, accompanied with plans and specifications of the exhibits and a statement of the number of operatives they desire to send for the erection and running of the exhibits.

The exhibits must be in Valparaíso or Santiago not later than March 15, 1894. [This date has doubtless been changed in consequence of the postponement of the exhibition to September, 1894.]

The Directory oblige themselves to pay the freight out and back again, by sea or land, of the exhibits; and also the passage-money out and back again of the workmen and operatives brought out for the installation and running of the exhibits.

Exhibitors will defray the cost of installation of their exhibits, but the Directory will provide tables and show cases for collections, plans and instruments.

The Directory will provide motive power for the machinery and apparatuses, and the minerals for experimental trials.

The Directory will not be responsible for loss from fire, or other unforeseen accidents.

The Directory will not respond for the loss or deterioration of exhibits which may not have been withdrawn within one month after the day fixed for the closure of the Exhibition.

The classification of the exhibits and the awards of prizes will be made by juries appointed by the Directory.

Each jury will be composed of three Chileans and two foreigners, and will be presided over by one of the members, who shall be elected by a majority of votes.

No jury can act unless three of its members be present, and in this

case their decision will not be binding unless they are unanimously of the same opinion.

If three only of the members of a jury should be present, and they should disagree in opinion, the other two members shall be cited to appear in order to arrive at a decision.

In case of absence or inability to attend of any of the members of a jury the Directory will appoint substitutes.

Exhibitors will be entitled to appeal from the decisions of the juries to the Directory, to which will be added the president of the respective jury.

In a previous dispatch to the Department of State, Minister Porter said : "The president of the society has written to me asking my good offices in the promotion of the enterprise, and I have promised to bring the subject to the notice of my Government, in the belief that it would assist in giving publicity to the proposed exposition and thereby invite the attention of such of our citizens as might desire to participate in it as exhibitors or otherwise. I think the recognition of this National Exposition in some way by our Government would be greatly appreciated by the Chilean government and people, and that substantial facilities offered our citizens wishing to exhibit mining machinery, etc., might not only promote the success of the Exposition, but also prove beneficial to some of our important manufacturing industries. I inclose the official publication entitled 'Lei i decretos supremos que organizan una Exposicion de Minería i Metalurgia en Santiago de Chile en 1894,' and especially call attention to the 'Programa' pages 4-6, showing the scope of the exhibition and the character and variety of the machinery and processes to be exhibited. It will be readily seen that the manufacturers of such machinery in the United States have in this an opportunity of presenting their improved methods and instruments under the most favorable conditions for their introduction into the country."

IV.

CURRENCY CHANGES IN CHILE.

The Bureau of the American Republics is informed that the following decree has been issued from the Ministry of Finance of Chile:

SANTIAGO, December 24, 1893.

Considering—

That the act of November 26, 1892, provides that 25 per cent of import duties shall be paid during the current year in gold at the rate of \$6.31 per pound sterling;

That in order to facilitate the fulfillment of this obligation, it was provided that the portion of the duties payable in gold might be paid in good bills on London;

That the Superintendent of the Mint has been authorized to purchase all the gold that may be offered him, paying for it in pounds sterling.

That this kind of money has, at present, no other use than the payment of import duties, and that for this cause it suffers a depreciation in the market with respect to bills drawn on Europe;

That it suits the state to receive the import duties in metallic currency, because with it, it economizes in the expenses of bringing gold to Chile;

I hereby decree:

The Direction of the Treasury shall exchange at par the gold that may be offered to it for bills on London at ninety days' sight, proceeding from the 25 per cent of the import duties that may be paid in this form.

Let it be noted, etc., etc.

MONTT,
ALEJANDRO VIAL.

The Chilean government has presented to Congress a bill to amend the Conversion Act, as follows:

Article 1. The 25 per cent of the import duties and storage dues payable in gold or in good bills on London, according to the acts of November 26, 1892, and of May, 1893, shall be paid in the equivalent of legal-tender currency in the form provided in the act of December 31, 1888.

Article 2. The 50 per cent of the export duty on nitrate, imposed by the act of October 1, 1880, shall be paid in good bills on London at ninety days' sight, and the duty for this effect shall be paid at the rate of 60.8 pence per 100 kilograms.

Sixteen per cent of the export duties payable in bills in conformity with the provisions of the preceding article shall be applied to the amortization of the

government paper money, in the form prescribed in the acts of November 26 1892, and of May 31, 1893.

Article 3. The President of the Republic is empowered to purchase, when he considers it advisable to do so, sufficient silver bullion to coin, together with the existing stock of bullion belonging to the nation, up to \$8,000,000 in the coins created by the act of November 26, 1892.

V.

IRON ORE AND MANGANESE IN CUBA.

The following is taken from United States Consular Reports for February, 1894 :

The principal iron mines of Cuba are between Santiago and Guantanamo, along the southeastern coast of the island, within a radius of fifty miles. Three American companies—the Juragua, the Sigua and the Spanish American—have, in the aggregate, invested about \$12,000,000 in plants to develop these mines. Several additional millions of American capital are invested in ships which transport the ore from Cuba to Baltimore, Philadelphia, Perth Amboy and New York.

During the year 1892 the amount of ore shipped from this consular district was 341,050 tons, and for the first six months of the present year the amount was 273,000 tons. Two of the three companies—the Sigua and the Spanish American—have shipped thus far very little ore, having not much more than established their plants when the late financial depression in the United States caused the mines to shut down.

The ore from the Cuban mines yields from 60 to 67 per cent of pig iron. But the value of iron ore does not depend alone upon the percentage of iron that it will yield, but also upon the nature of the foreign substances which must be eliminated. These foreign substances are usually sulphur, silica, phosphorus, manganese, alumina, lime, magnesia, together with organic and volatile matter. The Cuban ore is peculiarly free from all foreign substances except organic and volatile matter, which are easily and cheaply eliminated.

Manganese, which is used in the manufacture of steel, is also found in an unlimited supply in the same mountain range of Cuba in which the iron ore is found, but between Santiago and Manzanillo, within a distance of seventy-five miles. American enterprise has also asserted itself here by capturing the richest and most available mines. These mines are now being connected with the seaboard by short-line railroads.

During 1892 there were shipped to the United States from this consular district 18,851 tons of manganese, and during the first six months of the present year the amount transported was 11,640 tons.

I am reliably informed that immense quantities of manganese have been discovered in the Caucasus Mountains, between the Black and Caspian seas, and that European capitalists claim that they will be able to deliver manganese in Baltimore at \$9 per ton. Cuban manganese has been delivered there the past year at an average cost of about \$15 per ton. With the rich deposits of the Ponupo and other mines recently discovered here, the completion of railroad connections with the coast, and the addition of improved machinery now being put up, those interested in the Cuban mines confidently assert their ability to undersell the Europeans in the American markets. The decreased price of manganese will make available many Pennsylvania iron mines which it does not pay to work at present.

PULASKI F. HYATT, *Consul*.

SANTIAGO DE CUBA, *December 11, 1893.*

VI.

COMMERCIAL AND INDUSTRIAL INFORMATION.

ARGENTINE REPUBLIC.

The new wheat crop of the Argentine Republic is said to be an abundant one. It is expected that the surplus available for export will be largely in excess of the exportation last year which amounted to over 1,000,000 tons. The wool clip is also said to be heavy.

The final settlement of the frontier question with Chile has given

much satisfaction in the Argentine Republic as it puts an end to the controversy which was a cause of anxiety for both nations. "The immediate result," says the Buenos Aires Standard, "will be the establishment of numerous farms along the eastern slope of the Andes, from Neuquen to Chubut, to provide the Chilean markets with cattle, as heretofore settlers were deterred by the apprehension that any rupture with Chile would expose that part of Argentine territory to devastation."

About \$55,000,000 gold is said to be the aggregate invested in the wine industry of the Argentine Republic. The culture of the vine is carried on most extensively in the provinces of Mendoza and San Juan, and the industry is also being developed in Rioja, Buenos Aires, Catamarca, etc. The following figures as to the industry are given by the Buenos Aires Standard:

	Vineyards.	Capital.
	<i>Acres.</i>	<i>Gold.</i>
Mendoza	40,000	\$20,000,000
San Juan	30,000	15,000,000
Rioja	16,000	8,000,000
Buenos Aires	16,000	8,000,000
Catamarca, etc	8,000	4,000,000
Total	110,000	\$55,000,000

The same paper furnished the following data with respect to the industries of the Republic.

	Capital.	Gross yearly product.
	<i>Gold.</i>	
Sheep farming	551,000,000	77
Cattle	275,000,000	39
Tillage	144,000,000	86
Vineyards	55,000,000	8
Railways	390,000,000	24
Sundries	992,000,000	183
Total	2,407,000,000	417

A severe drouth has recently prevailed in the Argentine territory, causing damage to the pastoral interests.

It is said that negotiations are in progress for the conclusion of a commercial treaty between Argentine and Chile.

A co-operative store, on the lines of the United Service stores in London, is in successful operation at Chubut, Argentine Republic. It is stated that practically nearly every farmer in the colony is a member of it, delivering his wheat to the store at his convenience and drawing goods or cash as he may require. Nearly four-fifths of the trade of the colony is done in this manner. The company was only registered and its statutes approved in December, 1892, though it had been in existence six years. It has a board of directors of twelve members and a manager elected for a term of years.

BOLIVIA.

The Bolivian government is understood to be in treaty for the construction of a network of railways, 1,910 miles in length, connecting the cities of La Paz, Oruro, Cochabamba, Chupuisaca, Potosi, and Santa Cruz with one another, and also with the river Paraguay on the east and the Peruvian port of Tacna on the Pacific. The proposed lines would be:

	Miles
Santa Cruz to River Paraguay.....	360
Santa Cruz to Cuyaba.....	260
Santa Cruz to Cochabamba.....	380
Branches to Potosi, etc.....	240
Tacna to La Paz.....	250
La Paz to Cochabamba.....	270
Cochabamba to Beni.....	150
Total.....	1,910

The country is mountainous, and the cost of construction is put down at £10,000 per mile, the total estimated cost being £19,000,000. At present, the Republic has only one line, from Oruro to the Chilean frontier, 240 miles in length. The government is asked to give a grant of land 30 miles wide on each side of the projected lines, and with such a concession it is considered that the capital might be obtained without a government guarantee of interest.

BRITISH HONDURAS.

The Bureau of the American Republics made announcement recently that the people of British Honduras had petitioned the home government for the adoption of the United States gold dollar as a standard of value in the substitution of gold for silver currency which has been arranged for. An article in a recent number of the Colonial Guardian of Belize gives the reasons for this action. "United States currency," says the Guardian, quoting an address of the people's committee, "is the natural currency for this colony and that best suited to our local position and trade requirements." "The governor of British Honduras," adds the Guardian, "has frequently declared that this colony has in the future to trust chiefly to its agricultural products, and as our market for these products is solely and exclusively with the United States, its currency is best adapted to the encouragement of these industries, and to the future development of the colony." The people's committee say: "Our direct communication by steamer with England is irregular and uncertain, and the loss of time involved in the import and export of specie would be too great. There is not security that a sufficiency of British currency can at short notice be obtained in the United States. Especially would this be the case in New Orleans which is practically our monetary center, and from which the fruit vessels which trade with the colony draw their supplies of specie."

CHILE.

The government of Chile has issued a decree declaring that cyanide of potassium and other similar substances may be imported duty free. A bill granting the exemption, which was passed by Congress, was framed on the petition of a representative of a gold extracting company, as an encouragement to gold mining in Chile.

The Chilean Congress is considering a bill which throws open the construction of railways in Chile to all on equal terms. The bill was prepared after consultation between a standing committee of Congress and the cabinet ministers. The gratuitous use of public and municipal lands is conceded for the use of railways. Railways shall not

be built on the public roads, nor shall there be any grade crossings, and on private properties there shall be constructed such overhead and subways as may be necessary. The legal domicile of all owners of railways shall be Chile, and they shall be subject in everything relating to their undertakings to Chilean laws. The practical effect of the bill, as stated by the Chilean Times, would be that "small capitalists or a few proprietors among themselves would no longer be deterred, from a fear of expense and loss of time, from applying for powers to construct district lines. It should not be forgotten either that short district lines may very well develop into important roads which may open up very important sections of the country. In an immense number of cases, haulage to the grand trunk line or to the coast is a very costly matter at the present time, and greatly enhances the cost of agricultural produce. The case would be very different, however, if lines of railway were to take the place of the slow and unwieldy ox-cart and roads often of the worst description."

The following railway bills have been acted upon by the Chilean Congress :

A bill to empower Don Gustavo A. Oehninger to construct a railway from Peumo to Rancagua, a distance of about seventy kilometers, has passed the Deputies.

A bill to empower Mr. Charles A. Waters to construct a railway from Antofagasta to Aguas Blancas has passed both Chambers.

A bill has passed the Deputies to declare of public utility the lands necessary for an electric tramway between Santiago and Santa Rosa.

A bill to empower Don Cesar Covarrubias to construct a railway from Melipilla to Quilpue has passed a first reading in the Deputies.

A bill authorizing the prolongation of the Tongoy Railway has passed the Senate.

A bill to empower Don José Tomas Ramos to construct a railway from San Felipe to Piguchen has passed a first reading in the Senate.

With a view of stimulating the production of coal, a bill to exempt coal mines in Magallanes and Chilo from the payment of license during a period of fifteen years has been passed in the Chilean Chamber of Deputies. The properties are not to exceed 4,940 acres, and the annual production must be not less than 500 tons.

In order to afford home-made powder an advantage in competition

with the imported article, a bill has been passed by the Chilean Chamber of Deputies to reduce the duty on nitrate of potassium and chloride of potassium 15 per cent.

Mr. Guillermo Raby has been commissioned by the government of Chile to study coal mining in England, France and Belgium, and to prepare a report on the same.

A recent number of the Chilean Times states that the Joint Committee of the two Houses of the Chilean Congress has reported, as a means of increasing the production of nitrate, in favor of a law to prevent the forming of associations or the making of agreements to restrict, by artificial means, the production of this fertilizer. The committee expresses the opinion that this law should be framed in general terms to prevent, in the future, the formation of analagous associations intended to restrict or limit the free exercise of an industry, profession or trade. Referring to this bill, the same newspaper, in a subsequent issue, says: "The presentation of this measure may be accepted as the answer of the Chilean Congress to the recent attack on Chile and the Chilean government by the Nitrate Circle in London." "The actual combination," adds the Times, "will cease to exist in March, and then the era of the survival of the fittest will be inaugurated for the nitrate works generally."

MEXICO.

Mr. John Herbert Firth has obtained from the government of Mexico a concession empowering him to settle Hindoo colonists in Mexico. To this end, the government agrees to sell to Mr. Firth 500,000 hectares (1,235,550 acres) of public land in the states of Chiapas, Tabasco, Yucatan, Vera Cruz, Guerrero and Michoacan, and the territory of Tepic. Mr. Firth agrees to give to each one of the colonists at least five hectares (12,355 acres) of land for cultivation. Within ten years, Mr. Firth is to introduce at least 500 families of immigrants, twenty to be brought in during the first year. The colonists are to enjoy during the ten years certain privileges, such as exemption from military service and from all taxation excepting the municipal tax and the stamp tax, etc. The Mexican Financier says: "We have more than once pointed out the desirability of settling Hindoo colonists in this country."

Two ladies from the United States have recently returned from a trip into the wilds of Chiapas, which was taken for the purpose of looking into the prospects for investment in lands in Chiapas and of investigating the coffee industry on the Isthmus of Tehuantepec. They report that there are many haciendas under fine cultivation in Chiapas, one of them comprising upward of 50,000 acres. Land in Chiapas bought from the government costs about 40 cents an acre. An English company has bought a great tract of coffee land, seventy leagues long by fifty wide, in the district of Soconusco. There are about fifty persons from the United States in Chiapas. A representative of the Japanese government has recently secured a large reservation of land for his countrymen, and an importation of Japanese colonists and laborers is to be made.

J. M. Murray and F. F. Durkee, of Topeka, Kans., have sent a representative to the Isthmus of Tehuantepec, Mexico, to acquire about 100,000 acres of land near Coatzacoalcos, with a view of colonization for coffee growing.

The Armour Packing Company, of Chicago, recently sent agents to report on the prospects of stock raising in Sonora, Mexico, with a view to the establishment on Mexican soil of a meat cannery. They are understood to have reported that the cattle on the Sonora ranges were suitable, but that the hogs were few and ill-conditioned. They believe, however, that the state affords good facilities for breeding hogs to meet the demand of the proposed cannery.

The concession held by Messrs. Henkel Bros., for the construction of a railway from Teluca to Tenango, Mexico, has been reissued with modifications. Branches may be built to Santiago, Tianguistengo, and Calimaya, and the main line may be extended to Tenancingo. The line from Toluca to Tenango must be completed within six years from January 10, 1894.

A change is also reported in the concession granted to Luis Nienhoff, William Dick and A. L. Clark, for the construction of a railroad from the port of Chamela, on the west coast of Mexico, to the city of Guadalajara, and thence to the city of San Luis Potosi, thus making with the San Luis Potosi connection a transcontinental line across Mexico to the port of Tampico on the Gulf of Mexico. The revised concession allows for extensions of the line to the towns of Tequila, Etzatlan, Magdalena, Tequesquita and other points along

the *barranca* [ravine] of Mochitiltic, which will add materially to the length and usefulness of the road.

From a statement furnished by the Mexican secretary of finance, it appears that during the last half of the fiscal year 1892-'93, ending June 30, the total commercial and mineral exports of Mexico aggregated in value \$47,000,000, of which \$36,000,000 came to the United States.

A commission of citizens from the state of Vera Cruz, Mexico, recently waited upon President Diaz to urge that Alvarado be made a regular maritime port. Plans have been made for colonization along the coasts of Sotavento tributary to Alvarado. A German syndicate, with a capital of \$1,000,000, is preparing to settle large number of German and Belgian colonists on lands which are to be planted in tobacco.

President Diaz has signed the concession for the completion of the Interoceanic railway from Matamoras to Acapulco.

The Mexican government has entered into an arrangement with Señor Francisco Espinosa for control of all the water flowing from the great canal and five-mile tunnel now being constructed for the drainage of the valley of Mexico. The water is to be used for irrigation in the states of Mexico and Hidalgo to the north of the valley. An immense water power will be obtained, and it is expected that ultimately large manufacturing enterprises will utilize it. The works are to be completed in about two years.

A concession for supplying the city of Monterey with water has been granted to Col. James B. Simpson, of Dallas, Tex., who will also control the proposed new sewer system of the city.

The Lower California Development Company has obtained a concession empowering it to run a line of steamers between San Diego Cal., and Ensenada, San Quentin, and other parts of Lower California.

William B. Woodrow has obtained from the Mexican government a concession empowering him to establish a system of insurance on letters and parcels transmitted by mail from point to point of the republic, or between Mexico and foreign countries. He is also authorized to introduce, in connection with this business, a service of small money-orders for sums not exceeding \$25 between such towns of Mexico as he may select, or between points in Mexico and

abroad. The new service must be inaugurated in April next, and may continue for ten years.

The postal code of Mexico, it is stated, is to be materially improved. A commission for this purpose has been named by the government. The proposed changes are: The reduction of the tariff on printed matter and of the domestic rates of letter postage. Facilities for the prompt and safe handling of foreign mails are also to be adopted.

A Chicago company is actively engaged in developing the marble quarries at a point about twelve miles south of Ciudad Juarez (Paso del Norte), Mexico. Seven quarries have recently been opened.

MISCELLANEOUS.

A recent number of the Panama Star and Herald gives a favorable statement as to the progress of the work on the Cauca railroad from Buenaventura to Cali, Colombia. The owner of the concession, Mr. J. L. Cherry, is reported as saying that the work is progressing remarkably well, considering the labor difficulties with which he has had to contend.

The government of Haiti has increased the tonnage dues of steamers from 50 cents per ton of cargo landed at any point in Haiti, to \$1.83 per ton. This makes the rate for steamers the same as sailing vessels.

A provisional arrangement has been concluded between the Peruvian government and the Peruvian Corporation, suspending the monthly payments of the customs annuity until September next, the Peruvian Corporation being, in the meantime, freed from all fiscal, local and municipal taxes, and from the obligation to construct fifty kilometers of railway. It is understood that this arrangement has been made pending a final settlement by the next Congress.

The cacao crop of Ecuador for 1893 is said to be the best on record, aggregating 401,654 quintals, as against 334,625 quintals in 1892. The heaviest previous crop was in 1886, which was 17,000 quintals less than last year's yield. The quality in 1893 has also been very good.

I

RECIPROCITY TREATIES AND TRADE.

In his Annual Report for the year ending June 30, 1893, Mr. Worthington C. Ford, Chief of the Bureau of Statistics of the Treasury Department, prefaces the figures showing "Trade under the Reciprocity Treaties" with the following statement:

"Under the tariff act of 1890, commercial agreements were entered into with certain countries of South America and colonies of European nations. Some of the agreements have been in force for a period sufficient to gauge the effect, and they have been in force during two very exceptional years—1892, when the exports of domestic produce from the United States were the largest in its history, and 1893, when the imports of the United States also reached high-water mark. Whatever adverse influences could therefore apply to these agreements did not arise from conditions in the United States, but from conditions purely local to the countries with which it had entered into these commercial agreements. So far, therefore, as the United States is concerned, the experience of the last four years should be taken as conclusive upon the policy of these arrangements. It is also possible to gauge relatively the effect of the concessions contained in them by comparing the imports and exports into and from the United States of certain lines of articles with the commerce in similar lines of articles of other nations, nations enjoying no special privileges or concessions in these South American and West Indian markets. The policy can be judged only as any other natural force can be measured, by its results. Premising that the returns of imports into the United States for 1892 were overvalued in many important lines, I submit the following tables showing the trade of these reciprocity countries with the United States, United Kingdom, France and Germany. Comment is unnecessary.

"Under the reciprocity clause of the tariff act presidential proclamations were issued imposing duties upon the imports of sugar, hides and coffee from countries the customs regulations of which were believed to discriminate unduly against products of the United States. I need only refer to the decreased imports from the countries so affected, namely: Venezuela, Colombia, and Haiti, as evidence of their disastrous effect upon imports from those countries."

Commerce under Reciprocity.

The countries with which treaties of reciprocity are in force are Guatemala, Honduras, Nicaragua, Salvador, British West Indies, Santo Domingo, Cuba, Puerto Rico, Brazil and British Guiana. Analysis of the reports of commerce with those countries will afford some basis for conclusions as to the advantage to be derived from what is called reciprocity.

GUATEMALA.

Domestic products exported from the United States to Guatemala during the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton.....	\$ 86,139	\$ 79,310	\$ 89,742	\$ 87,663	\$ 79,816
Leather and manufactures of	15,620	13,323	25,318	27,075	22,229
Manufactures of iron and steel	106,569	232,385	270,037	147,002	151,184
Totals of all exports....	\$969,571	\$1,326,001	\$1,971,001	\$1,809,577	\$1,713,142

Manufacturers of cotton goods will discover that their exports to Guatemala were over \$6,000 less in 1893 than in 1889. It is for them to determine whether the change has been due to the treaty made under the law of 1890. Manufacturers of iron and steel will find that as against \$232,385 of exports in 1890, which was an increase of more than 100 per cent. over the exports of the preceding year, their exports in 1893 fell to \$151,184. In manufactures of leather, the figures show an increase from 1890 to 1892 and thereafter a decrease.

Imports of coffee, hides and skins, and sugar from Guatemala into the United States during the years, ending June 30, 1889 to 1893 :

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee	\$2,095,729	\$1,988,423	\$2,275,107	\$2,923,271	\$2,325,990
Hides and Skins.....	80,022	106,343	99,834	37,481	64,483
Sugar	49,204	24,331	none.	none.	720
Totals	\$2,225,055	\$2,119,094	\$2,374,941	\$2,960,752	\$2,391,193

During the years 1889 and '90, there was a tariff levied upon the importation of sugar from Guatemala. That tariff was removed by the law of 1890.

HONDURAS.

Exports from the United States to Honduras during the years, ending June 30, 1889 to 1893 :

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton....	\$96,182	\$105,437	\$76,702	\$91,314	\$67,733
Manufactures of iron and steel.....	93,392	41,172	83,590	54,598	44,521
Leather and manufactures of	10,491	10,485	6,049	10,859	7,836
Totals of all exports....	\$618,973	\$522,631	\$583,114	\$478,947	\$442,907

Imports from Honduras to the United States of articles affected by the reciprocity treaty :

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee.....	\$418,690	\$39,456	\$9,845	\$18,757	\$16,907
Sugar	3,249	none.	none	none.	none.
Totals of all imports....	\$54,247	\$92,667	\$50,998	\$77,873	\$49,614

It will be noted that the imports of sugar from Honduras into this country ceased in 1889. Also, that the total of imports in 1893 were over \$40,000 less than in 1890.

NICARAGUA.

Exports of leading products from the United States to Nicaragua for the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton....	\$105,339	\$96,911	\$106,524	\$81,177	\$61,569
Manufactures of iron and steel.....	86,548	158,446	168,550	120,162	76,932
Leather and manufactures of	32,864	36,613	49,385	47,965	33,602
Totals of all exports....	\$900,813	\$1,270,073	\$1,592,013	\$1,187,189	\$812,684

Imports from Nicaragua into the United States for the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee.....	\$633,216	\$642,467	\$635,354	\$426,637	\$155,183
Totals of all imports. ..	\$814,669	\$797,284	\$368,209	\$595,998	\$276,447

Both in the exports to and the imports from Nicaragua, commerce has decreased since 1890. Of sugar, there was a little over \$1,000 worth imported in 1891, and no imports of this article since that time.

SALVADOR.

Exports of leading products from the United States to Salvador for the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton	\$183,220	\$120,481	\$221,750	\$168,817	\$106,247
Manufactures of iron and steel.....	84,711	155,798	127,193	122,339	145,439
Leather and manufactures of	9,227	3,013	3,872	5,233	3,202
Totals of all exports....	\$690,884	\$886,231	\$1,134,995	\$1,274,021	\$1,118,054

Imports from Salvador into the United States for the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee.....	\$1,510,628	\$1,305,894	\$1,570,869	\$2,272,251	\$1,282,990
Sugar.....	26,188	69,846	49,844	11,795	4,367
Totals of all imports....	\$1,562,698	\$1,392,971	\$1,734,701	\$2,300,925	\$1,305,516

In the matter of exports from this country to Salvador, these figures show a phenomenal increase from 1889 to 1891, and a decrease between 1891 and 1893. In the exports from Salvador into the United States, there has been a decrease of something over \$200,000 since 1889.

BRITISH WEST INDIES.

Exports of leading products from the United States to the British West Indies during the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton....	\$178,392	\$181,354	\$188,885	\$163,485	\$187,971
Manufactures of iron and steel	124,710	110,203	175,747	161,101	163,215
Leather and manufactures of	121,040	146,564	122,804	90,036	77,257
Totals of all exports....	\$8,197,693	\$8,074,433	\$9,546,058	\$7,995,185	\$7,912,341

Imports from the British West Indies into the United States for the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee.....	\$1,689,217	\$803,281	\$817,833	\$1,065,559	\$1,164,120
Sugars (free)	None.	None.	3,740,762	7,037,228	9,635,275
Sugars (dutiable).....	9,960,479	9,910,130	6,130,585	7	45
Totals of all imports....	\$11,699,342	\$9,758,645	\$9,760,183	\$8,138,945	\$11,833,337

High-water mark was reached in the totals of exports to the British West Indies from this country in 1891. The decline since that time has been marked, exceeding the increase from 1889 to 1891. In spite of this decrease of exports to the British West Indies, the figures show a net increase in the amounts of products received from those countries. This is due to the increase in the importation of sugar since the removal of the tariff duty upon that article.

SANTO DOMINGO.

Exports of leading products from the United States to Santo Domingo during the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton....	\$126,327	\$66,525	\$52,917	\$62,601	\$101,336
Manufactures of iron and steel	161,207	126,937	173,119	236,768	218,705
Leather and manufactures of	23,527	9,320	9,911	7,090	8,692
Totals of all exports....	\$1,150,651	\$926,651	\$986,826	\$984,188	\$1,108,733

Imports from Santo Domingo into the United States during the years, ending June 30, 1889 to 1893 :

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee.....	\$100,868	\$49,443	\$51,972	\$38,041	\$111,823
Sugars (free).....	None.	None.	689,463	2,017,739	2,054,201
Sugars (dutiable).....	1,143,523	1,715,460	593,168	None.	42
Totals of all imports..	\$1,305,888	\$1,842,152	\$1,420,106	\$2,137,427	\$2,249,429

The figures of commerce between Santo Domingo and the United States show a gratifying increase of trade, the amount of sugars received since the removal of the duty having almost doubled.

CUBA.

Exports of leading products from the United States to Cuba during the years, ending June 30, 1889 to 1893:

ARTICLES	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton....	\$126,180	\$130,418	\$101,799	\$114,112	\$148,178
Manufactures of iron and steel.....	1,302,823	1,669,940	1,691,731	2,418,078	3,964,582
Leather and manufactures of	166,334	194,330	172,813	277,386	181,446
Totals of all exports....	\$11,297,198	\$12,669,509	\$11,929,605	\$17,622,411	\$23,604,094

Imports from Cuba into the United States during the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee.....	\$12,420	\$1,120	\$1,942	\$1,477	\$395
Sugars and molasses (free)...	None.	None.	22,882,647	62,644,399	61,718,665
Sugars & molasses (dutiable)	39,644,243	39,099,670	23,947,261	213	39
Totals of all imports....	\$39,900,919	\$39,384,417	\$47,186,402	\$62,918,599	\$61,998,252

How important Cuba is as a market for the products of this country is well shown in the above figures. Manufacturers in all branches may study these figures with profit. They will see that there is a large margin between the imports and exports which might be filled with products of American manufacture under proper conditions and with proper effort.

PUERTO RICO.

Exports of leading products from the United States to Puerto Rico during the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton.....	\$18,727	\$30,144	\$22,529	\$34,048	\$15,744
Manufactures of iron and steel	50,598	59,295	65,538	55,550	106,883
Leather and manufactures of	10,143	9,569	12,625	9,860	9,291
Totals of all exports....	\$2,175,458	\$2,247,700	\$2,112,334	\$2,808,631	\$2,502,788

Imports from Puerto Rico into the United States during the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee.....	\$48,290	\$140,435	\$39,686	\$26,891	\$23,814
Sugars and molasses (free)..	None.	None.	1,775,177	3,169,736	3,336,427
Sugars and molasses (dutiable).....	3,570,623	3,861,247	1,286,147	None.	1,411
Totals of all imports...	\$3,621,353	\$4,002,746	\$3,101,010	\$3,197,623	\$3,961,652

BRAZIL.

Exports of leading products from the United States to Brazil during the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
(Admitted free of duty)					
Agricultural implements....	\$ 31,848	\$ 49,610	\$ 70,633	\$ 31,383	\$ 36,159
Breadstuffs.....	4,064,809	4,940,765	4,348,948	5,158,138	3,709,10
Manufactures of iron and steel.....	708,688	745,250	1,883,329	1,813,739	1,443,49
Totals of all exports....	\$5,372,014	\$6,818,372	\$8,181,791	\$9,000,939	\$6,335,873

(Admitted into Brazil with a reduction of duty of 25 per cent.)

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton.....	\$631,094	\$813,700	\$581,974	\$749,370	\$1,402,569
Manufactures of iron and steel.....	207,164	193,409	1,832,329	1,813,739	1,443,459
Leather and manufactures of (except boots and shoes)...	10,053	14,667	19,964	15,572	16,134
Totals of all exports....	\$9,276,511	\$11,902,496	\$14,049,273	\$14,240,009	\$12,339,584

Imports from Brazil into the United States during the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee.....	\$44,891,739	\$45,664,127	\$62,022,022	\$95,751,724	\$57,136,680
Sugar and molasses (free)...	None.	None.	2,860,204	4,468,145	2,921,946
Sugar and molasses (dutiable).....	4,838,121	1,659,251	2,280,919	41,136	None.
Totals of all imports....	\$51,961,951	\$49,501,260	\$69,673,489	\$103,035,951	\$62,257,685

Because of the internal disturbances in Brazil, by which all commerce was impeded, these figures give only a hint as to the natural increase in the trade between the two countries. While the receipts of coffee have fallen off during the last eighteen months, it is very apparent from the increase in the trade of that article from 1889 to 1892 that there is a strong natural tendency for trade between the United States and this southern republic.

BRITISH GUIANA.

Exports of leading products from the United States to British Guiana during the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton....	\$25,699	\$24,491	\$22,368	\$33,761	\$24,421
Manufactures of iron and steel....	17,064	14,198	21,825	55,654	17,177
Leather and manufactures of	11,289	10,257	4,624	5,317	3,120
Totals of all exports....	\$1,643,249	\$2,011,122	\$1,761,350	\$1,885,542	\$1,943,012

Imports from British Guiana into the United States during the years ending June 30, 1889, to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee.....					\$384
Sugars and molases (free)....			\$973,470	\$4,361,052	5,017,661
Sugars and molases(dutiable)	\$4,510,235	\$4,324,545	3,892,602	8	.....
Totals of all imports....	\$4,510,235	\$4,324,545	\$4,866,072	\$4,361,060	\$5,019,397

Retaliatory Proclamations.

The following proclamation was issued under the authority conveyed in the tariff act of 1890. It applied in the same terms to the Republics of Colombia, Venezuela and Haiti. The proclamation was as follows :

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA.—
A PROCLAMATION.

Whereas in Section 3 of an Act passed by the Congress of the United States entitled "An Act to reduce the revenue and equalize duties on imports, and for other purposes," approved October 1, 1890, it was provided as follows :

"That with a view to secure reciprocal trade with countries producing the following articles, and for this purpose, on and after the first day of January, eighteen hundred and ninety-two, whenever, and so often as the President shall be satisfied that the Government of any country producing and exporting sugars, molasses, coffee, tea, and hides, raw and uncured, or any of such articles, imposes duties or other exactions upon the agricultural or other products of the United States, which, in view of the free introduction of such sugar, molasses, coffee, tea and hides into the United States, he may deem to be reciprocally unequal and unreasonable, he shall have the power and it shall be his duty to suspend, by proclamation to that effect, the provisions of this Act relating to the free introduction of such sugar, molasses, coffee, tea and hides, the production of such country, for such time as he shall deem just, and in such case and during such suspension duties shall be levied, collected and paid upon sugar, molasses, coffee, tea and hides, the product of or exported from such designated country" the duties hereinafter set forth :

And whereas it has been established to my satisfaction, and I find the fact to be, that the Government of Colombia does impose duties or other exactions upon the agricultural and other products of the United States, which, in view of the free introduction of such sugars, molasses, coffee, tea and hides into the United States, in accordance

with the provisions of said Act, I deem to be reciprocally unequal and unreasonable :

Now, therefore, I, Benjamin Harrison, President of the United States of America, by virtue of the authority vested in me by Section 3 of said Act, by which it is made my duty to take action, do hereby declare and proclaim that the provisions of said Act relating to the free introduction of sugars, molasses, coffee, tea and hides, the production of Colombia, shall be suspended from and after this fifteenth day of March, 1892, and until such time as said unequal and unreasonable duties and exactions are removed by Colombia and public notice of that fact given by the President of the United States, and I do hereby proclaim that on and after this fifteenth day of March, 1892, there will be levied, collected and paid upon sugars, molasses, coffee, tea and hides, the product of or exported from Colombia, during such suspension, duties as provided by said Act, as follows :

All sugars not above number thirteen Dutch Standard in color shall pay duty on their polariscopic tests as follows, namely :

All sugars not above number thirteen Dutch Standard in color, all tank bottoms, sirups of cane juice or of beet juice, melada, concentrated melada, concrete and concentrated molasses, testing by the polariscope not above seventy-five degrees, seven-tenths of one cent per pound ; and for every additional degree or fraction of a degree shown by the polariscopic test, two hundredths of one cent per pound additional.

All sugars above number thirteen Dutch Standard in color shall be classified by the Dutch Standard of color, and pay duty as follows, namely : All sugars above number thirteen and not above number sixteen Dutch Standard of color, one and three-eighths cents per pound.

All sugar above number sixteen and not above number twenty Dutch Standard of color, one and five-eighths cents per pound.

All sugars above number twenty Dutch Standard of color, two cents per pound.

Molasses testing above fifty-six degrees, four cents per gallon.

Sugar drainings and sugar sweepings shall be subject to duty either as molasses or sugar, as the case may be, according to polariscopic test.

On coffee, three cents per pound.

On tea, ten cents per pound.

Hides, raw or uncured, whether dry, salted or pickled, Angora goat skins, raw, without the wool, unmanufactured, asses' skins, raw or unmanufactured, and skins, except sheep-skins, with the wool on, one and one-half cents per pound.

In witness whereof, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington, this fifteenth day of March, one thousand eight hundred and ninety-two, and of the
 [SEAL.] Independence of the United States of America the one hundred and sixteenth.

BENJ. HARRISON.

By the President:

WILLIAM F. WHARTON,

Acting Secretary of State.

Countries affected by the President's Proclamation of March 15, 1892.

COLOMBIA.

Exports of leading products from the United States to Colombia during the years, ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton.....	\$254,407	\$171,278	\$290,367	\$296,198	\$219,989
Manufactures of iron and steel.....	341,737	306,692	278,417	282,481	292,209
Leather and manufactures of	76,182	24,594	49,448	54,873	47,589
Totals of all exports....	\$3,728,961	\$2,522,351	\$3,108,989	\$3,065,466	\$3,047,620

Imports from Colombia into the United States during the years, ending June 30, 1889 to 1893 :

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee (free).....	\$2,170,963	\$1,849,441	\$2,491,811	\$1,620,965	\$ 451
Coffee (dutiable).....				367,714	1,391,801
Sugar and molasses (free).....			21		
Sugar and molasses(dutiable).....	27,309		28		
Totals of all imports....	\$3,126,138	\$2,479,540	\$3,259,603	\$1,586,030	\$2,057,488

VENEZUELA.

Exports of leading products from the United States to Venezuela during the years, ending June 30, 1889 to 1893 :

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton.....	\$466,143	\$429,094	\$565,242	\$426,606	\$427,538
Manufactures of iron and steel.....	212,091	259,156	383,825	320,912	234,063
Leather and manufactures of	15,117	19,534	29,488	20,162	13,518
Totals of all exports....	\$3,703,705	\$3,984,280	\$4,716,047	\$3,991,908	\$4,142,051

Imports from Venezuela into the United States during the years, ending June 30, 1889 to 1893 :

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee (free).....	\$ 9,138,591	\$ 9,662,207	\$10,814,874	\$8,229,872	\$ 61,537
Coffee (dutiable).....				865,170	2,410,806
Hides and skins (free).....	861,582	812,347	898,492	590,021	972
Hides and skins (dutiable).....				90,680	637,569
Totals of all imports....	\$10,000,473	\$10,474,559	\$11,713,366	\$9,825,743	\$3,110,884

HAITI.

Exports of leading products from the United States to Haiti during the years, ending June 30, 1889 to 1893 :

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Manufactures of cotton.....	\$536,711	\$749,954	\$676,666	\$544,574	\$722,647
Manufactures of iron and steel.....	189,711	128,449	37,396	58,711	58,849
Leather and manufactures of	33,230	76,915	50,103	29,589	51,334
Totals of all exports....	\$3,975,461	\$5,101,464	\$5,589,178	\$4,963,430	\$5,170,634

Imports from Haiti into the United States during the years ending June 30, 1889 to 1893:

ARTICLES.	1889.	1890.	1891.	1892.	1893.
Coffee (free).....	\$2,796,194	\$1,270,247	\$1,988,943	\$2,191,774	.....
Coffee (dutiabie).....				5,550	929
Hides and skins (free).....	41,215	30,391	24,029	18,155	82
Hides and skins (dutiabie).....				4,256	16,962
Sugar and Molasses (free).....				535	.....
Sugar and molasses (dutiabie).....	4,430	.....	32,995	.....	.....
Totals of all imports....	\$2,831,839	\$1,300,638	\$2,045,967	\$2,220,270	\$17,973

Manufacturers of the products noted in the above lists may draw their own conclusions as to the effect of retaliatory measures upon trade. Manufacturers of leather will strive in vain to regain that portion of the trade they seem to have lost in Venezuela and Colombia, unless steps shall be taken to remove the barrier erected by the proclamation. How strong the tendency is to trade between these countries can be seen by examination of some of the above items. In spite of the hostile measure adopted by the United States, the exports of leather and its manufactures to Haiti increased after the issuance of the proclamation. This is in spite of the fact that the importation of coffee from that country has practically ceased. This applies also to the figures showing the totals of exports to Colombia. Losing largely in the imports of coffee, the totals of exports show but slight variation. The most apparent effect of legislative interference seems to have been the restriction of the natural tendency to trade.

II.

COMMERCIAL OUTLOOK IN BRAZIL.

By the termination of the naval revolt in the port of Rio de Janeiro, the obstacles put in the way of the trade of the capital by the insurgent vessels have been removed. Doubtless, the commercial movement will return to its former conditions, and we may expect to see a considerable increase in imports and exports, as has been the case in the other ports of the Republic of Brazil.

During the last three months of the revolt, the trade of Rio fell off proportionally more than in the two preceding months, the decrease amounting to about one-third from the corresponding period of 1893; but the energetic action of Admiral Benham in forcing the insurgents to abandon their interference with American vessels stimulated the naval commanders of other foreign war vessels in port to afford a better protection to the trade of their countries, so that, in spite of the severity of the epidemic of yellow fever, the customs receipts had begun to show a considerable increase, even before the collapse of the revolt.

Whether or not the tariff legislation pending in the United States Congress shall abrogate the commercial agreement existing between Brazil and this country since April 1, 1891, there can be no doubt that the friendly feeling excited by the attitude of the United States Government and the sympathy of the American people with the lawful Republican Government of Brazil will lead to still closer commercial relations between the two nations, and to a considerable increase in their commerce with each other. That feeling has been recently expressed in a communication from the Brazilian Government to a leading American journal, and has been publicly manifested on several occasions in the beleaguered capital of that country. The significance of the expression in the communication referred to, that the government and people of the United States have "materially

aided" in the success of the lawful authorities, will be best appreciated by those who know most in regard to the assistance rendered by this country. That it has been effective none can doubt.

At this writing, the insurgents hold only the unimportant City of Desterro and the small island on which it is situated, with only two war vessels and some scattered bands of cavalry in the States of Paraná and Rio Grande do Sul. The ports of these States are in the hands of the lawful government, and their commerce has not been interfered with.

It cannot be long before the pacification of the entire country will permit a renewal of the spirit of enterprise and development which showed itself so markedly soon after the establishment of the Republic. Few are aware of the material progress made by Brazil in the short time since the downfall of the Empire, and of the vigorous advance made by the States of the Brazilian Union under the new *régime*.

Perhaps the best evidence of the general industrial awakening, next to the great increase in the commerce of all the ports, is furnished by the fact that in all the States in which, under the Empire, there was an annual deficit to be made up from the imperial Treasury, a surplus has been realized. Decentralization, with the consequent abandonment of paternalism, aroused the slumbering activities and directed them to the development of the abundant resources of the country, varying with the locality, but always remunerative.

The advances made in trade and manufactures have been accomplished in spite of a depreciated currency, whose bad condition is in great part due to the hostile financial policy of certain powerful banking interests which, partly from gratitude for favors received from the defunct regime, and partly from more selfish motives, have opposed the re-organization of the finances of the Republic. Brazilians complain that the same influences have been supplying the insurgents with the means of prolonging the revolt.

In the absence of official statistics for the commerce of the several ports of Brazil, we may refer to the estimates of the Minister of Finance for the annual budgets, in order to form an idea of the general increase in commerce since the establishment of the Republic. According to

these estimates the amounts to be supplied by duties on imports were as follows:

1890.....	100,487,443	milreis.
1891.....	106,217,526	"
1892.....	131,175,104	"
1893 (First quarter year).....	31,943,666	"

The customs receipts from import duties alone at Rio de Janeiro, whose foreign commerce represents about one-half of that of the entire country, are officially given as follows:

1889.....	48,947,325	milreis.
1890.....	50,157,404	"
1891.....	71,149,849	"
1892.....	84,349,201	"
1893 (First half year).....	53,164,830	"

For the whole country, the customs receipts for the same period are given as follows:

1889.....	90,216,071	milreis.
1890.....	100,487,442	"
1891.....	106,217,526	"
1892.....	131,175,103	"
1893 (First quarter year).....	47,973,315	"

It will be seen from the above that the imports for the whole country have increased more rapidly than those of the port of Rio de Janeiro, a result that may be attributed to the effects of the political decentralization before alluded to.

An exact comparison of commercial data for different periods is rendered difficult by the fluctuating value of Brazilian money, in which statistics are stated, so that the increase in trade shown by them is sometimes more apparent than real. The par value of the Brazilian milreis is 27 pence sterling, and the fluctuations to which it is subject may be seen from the fact that in 1888 the average par value was 25 $\frac{1}{4}$ pence; in 1889, 26 $\frac{13}{16}$ pence; in 1890, 22 $\frac{5}{8}$ pence; in 1891, 16.33 pence; in 1892 and 1893, about 11.5 pence.

Another fact that complicates the comparison is that the duties have sometimes been collected in gold, which has always been at a premium, without taking into account the difference between the metal and the paper in making up the tables of the statistics.

The exports of coffee, nearly all through the ports of Rio and Santos, show a considerable falling off for the year 1892-93, compared with those of 1891-92, particularly for Rio, whence 2,808,657 bags of 132 pounds each were exported in 1892-93 against 3,725,818 in the previous year.

The exports of coffee from Santos were 3,411,498 bags in 1892-93, against 3,588,142 in 1891-92. From Santos, in 1892-93, 2,288,478 bags were sent to Europe, and 1,118,789 to the United States; while in the same year from Rio 1,884,287 bags went to the latter country, against 775,297 exported to Europe.

It thus appears that as a port of export for the great staple of Brazil, Santos has become more important than Rio de Janeiro.

The exports of coffee from Victoria, the capital of the State of Espirito Santo, have increased from 105,270 bags in 1891-92 to 185,606 in 1892-93; of this latter amount, the United States took 146,393 bags, and 39,300 went to Europe.

There are no official statistics of coffee exports. The above figures are taken from the "Rio News," and are regarded as a very conservative estimate. Another authority puts the exports of coffee from Rio for 1892-93 at 2,943,191 bags. The exportations of coffee from Bahia, formerly insignificant, have latterly reached considerable importance. In consequence of the diminished exports, the price of that staple has reached a price unknown for years, which appears likely not to be soon materially less, if the estimates for the crop of 1893-94 are well founded. A well-known Rio exporting house estimates the probable crop for this year at about 3,000,000 bags, smaller than for many years. The stock on hand June 30, 1893, in Rio was only 117,000 bags.

The Brazilian planters, however, are better satisfied with a short crop and long prices than with a large one that brings the unremunerative prices of a few years ago; so that with an increasing export of rubber at 70 cents per pound and almost unexampled prices for her other great staples, Brazil now appears to be able to set her finances in order and increase her commerce.

The latest trustworthy statistics of the rubber export from the Amazon ports of Pará and Manáos put the total for 1891 at 160,474 tons, valued at over \$30,000,000.

The effects of the reciprocity convention between the United States and Brazil, which according to the Report of the British Foreign Office, No. 1321, caused "considerable alarm by the serious injury which it was feared might result to British trade," appear to have been other than those apprehended. It was feared that American cotton goods, with an advantage of twenty-five per cent. in the import duty, would exclude certain classes of English manufacture. Complete statistics for comparison are not yet accessible, but a partial comparison shows that while the exportation of cotton goods from the United States to Brazil, according to the New York "Commercial Bulletin," during the eight months ending February, 1893, had increased 5,815,000 yards over that of the corresponding period of 1892, the British Board of Trade returns show an increase in the exports of cotton goods from Great Britain to Brazil, of 20,193,000, for the three months ending March 31, 1893, compared with the corresponding quarter of 1892.

This would seem to indicate that some influence more potent than reciprocity has governed the trade between Brazil and the two countries named, at least in cotton goods.

By the election, on the first of March, of a civilian as President of the Republic for the four years beginning November 15, 1894, the outlook for political peace and stability in Brazil is bright and full of promise for commercial prosperity; as the political and financial interests that have hitherto disturbed the nation must be now convinced of the hopelessness of further efforts. American merchants and manufactures have now an undisputed advantage in the competition for Brazilian trade, and on their enterprise depends the securing of a larger share than has heretofore been enjoyed.

III.

RAMIE CULTURE IN SOUTHERN COUNTRIES.

The possibilities of ramie fibre culture in Mexico, the West Indies and Central and South America, have attracted renewed attention from the efforts of Mr. Walter J. Hollier of New Orleans to stimulate interest in the subject. Mr. Hollier has recently visited Colombia and Jamaica with this object in view, and also, to introduce a newly invented machine which, he claims, will solve the problem of preparing ramie for market in a rapid and economical manner. At a meeting held at the Jamaica Institute, at which the Governor of the colony was present, Mr. Hollier described the prospects for ramie culture in Jamaica, and expressed the opinion that it would prove very profitable. The Governor, Sir Henry Blake, said there were two fibres which can undoubtedly be produced in Jamaica: the sisal hemp and ramie. The cultivation of sisal has already been undertaken at the plantation of Colonel Ward, and is said to be doing well. The production of sisal hemp, however, is one requiring capital, while ramie can be raised by small as well as large growers. The Governor said: "If, in the future, the cultivation of ramie were carried out to a sufficient extent, and if a large area were put under this cultivation, I do not think it is an impossible thing that capital may be induced to come to this island, not alone for the decorticating and degumming of this fibre, but for the purpose of utilizing our magnificent water-power for working up this and other fibres into textile fabrics." The Governor also expressed the opinion that India rubber may be profitably grown in Jamaica, and recommended the extensive planting of India rubber trees.

A paper on the ramie fibre prepared by Mr. Hollier was read before the meeting. Mr. Hollier says:

Rhea fibre is a textile material, produced by one or two more species of *Bœhmeria* (natural order *Urticacex*) plants found over a

wide range in India, China, the Malay Peninsula and islands, and Japan. Rhea is also capable of growth in temperate latitudes, and has been introduced into the South of France, Algeria, Italy, Spain and some parts of the United States. Its introduction into France was immediately caused by the ravages of the Phylloxera among the vines in that country. So far as I am aware, there are four different varieties of the plant known in Botany, viz :

- (1) "*Boehmeria Nivea*" distributed over Eastern Asia, and commonly but very inappropriately called China Grass.
- (2) "*Boehmeria Tenacissima*" also found through Eastern Asia.
- (3) "*Boehmeria Sanguinea*" found in Java.
- (4) "*Boehmeria Puva*," an allied plant commonly called "Pooah" found growing wild in the North of India.

All these varieties of the plant are sources of the Rhea fibre, but the three first mentioned varieties are called indiscriminately by the Malay name "RAMIE."

B. Nivea and B. Tenacissima are the most important as fibre producing plants; the former was the earliest known and derived its distinctive appellation from the white color under the leaf. The latter was named by Roxburgh "*Tenacissima*" on account of the superiority of the strength of its fibre over that of various fibres then known, and on which he experimented in India. The leaves of the *Tenacissima* unlike the *Nivea*, are entirely green, with grey veins on the under surface. Both these varieties, I learn, have been for a long time cultivated here in the Government gardens with the most happy results.

The B. Nivea, although the first known and most extensively used in China, yields the place to the B. Tenacissima as the most valuable plant of any of the varieties.

According to Royle, the fibre of the *Tenacissima* is stronger than that of any other plant, its force being expressed in comparison with the following fibres, thus :—

Hemp represented at.....	160
Agave fibre.....	190
Ramie fibre.....	280

Aston gives the following result of his experiments with untwisted fibre.

B. Nivea of China.....	250
Cultivated Ramie of Assam (B. Tenacissima).....	310
Wild Ramie of Assam (B. Tenacissima).....	343
Yakka fibre.....	175
St. Petersburg Hemp.....	160

The fibre of B. Tenacissima first appeared in the European market in 1810 and a cord then spun from it was found to sustain a weight of 252 lbs., while a similar cord of Russian hemp was estimated by Admiralty test not to bear more than 84 lbs., so that the Ramie cord was more than three times as strong as the Russian Hemp.

It thus clearly appears from these considerations alone, that B. Tenacissima is to be preferred for qualities of strength to the B. Nivea.

It has been further demonstrated that Tenacissima produces more fibre, on the whole, than the Nivea.

Goncet de Mas of Padua, has given his opinion that the Tenacissima is more hardy and will stand prolonged droughts and floods more readily than the Nivea. This, however, has not been my experience in the Southern States of the United States; there the B. Nivea does much better on poor land and produces a much larger quantity of seed, which appears in clusters near the top of stalk. It has less gum, and is therefore easier to degum; and both the stalk and the decorticated ribbons dry readily. Its ultimate or primitive fibre, is very white, though it is not nearly so lustrous, and is only about half as long as that of the Tenacissima, which has a creamy shade, with a beautiful silken lustre. When immersed in water it is perfectly white.

Ramie is of growing value as a fibre plant. It is a shrubby plant growing to the height of from five to eight feet, with foliage and inflorescence like the common nettle, but destitute of stinging hairs; it is the most prolific of textile plants. In Natal, an indigenous variety grows to the enormous height of twenty-four feet.

The plant thrives in hot, moist, shaded situations, and prefers light loamy and sandy soils, and will yield from three to five crops per annum.

All the varieties of Ramie have a very rapid growth, and according to the fertility of the soil, increase for years in quantity by shoots springing up from the roots.

The United States agricultural reports for 1867 (p. 220) give an account of Mr. F. J. Knapp's successful experiment in propagating Ramie by the subdivision of the roots and by layers. It states that from 100 roots planted in March he produced 40,000 plants in nine months. This shows how easily and rapidly the plant may be propagated and demonstrates that a Ramie plantation is within the reach of every planter and that at a trifling cost.

In Louisiana, where the soil can in no way compare with the soil of this Island, and where the planters do not facilitate the overtaxed soil, a field once planted will last with proper care for four to five years; at the expiration of that time, the roots should be ploughed out and replanted, after the soil has been manured.

Ramie is no new thing. It is well known that its cultivation and use as a textile in China and Japan dates back to immemorial time. For thousands of years, the Chinese have used it in their silk manufacture, a fact first detected many years ago by a Russian trader.

Rhea is used in Eastern Asia for a variety of purposes such as fishing nets, cordage, ropes, sails and for textile fabrics as well. In Europe it is used in combination with silk, wool and cotton, in the manufacture of dress stuffs, curtains, carpets, rugs, damasks, table cloths, towels, sheets, laces, handkerchiefs, hosiery and thread. It has also been demonstrated that a material can be made of Rhea, closely resembling leather, and suitable for bands for machinery, and that a three inch Rhea band was equal to a nine inch leather band, leather costing five cents per pound and Rhea band estimated at one cent per pound.

Rhea unmixed is also now being made into textile fabrics and their extreme beauty gives assurance that the demand will increase with the supply. These fabrics are as beautiful as silk and as durable as linen. Indeed, as already stated, China silk contains a large proportion of Rhea, and there is no doubt that if these

fabrics can be produced at a reasonable cost, people will soon come to prefer them.

The governments of several countries—not omitting to mention Jamaica—have from time to time offered large cash prizes for the invention of machines and processes capable of preparing the fibre for manufacture on a scale large enough and sufficiently economically to meet the demands of commerce. Thousands of pounds have been spent and hundreds of inventions have been devised and experimented with—hitherto in vain.

The tedious and expensive methods of preparation practiced by the natives of China and the East Indies and the somewhat more efficient machinery and processes now in use in Europe, have proved quite inadequate to furnish the prepared fibre in any considerable quantity or at a cost which will allow it to compete with other textile materials, and manufacturers have hitherto found it impossible to obtain anything like a sufficient supply to meet their wants.

A number of English firms, notably Surol, E. G. Lester, Sangster, Wade & Son, Whittaker of Bradford, Wm. Hutchison & Co., of London, and the China Glass Company have undertaken the manufacture of Rhea and have followed it up energetically, though with indifferent success, owing to the insufficiency of the supply.

The *Manufacturers' Record* of America, of January 10th, 1892, says: "Specimen pieces of carpet have already been manufactured of Ramie by Johnson and Wolf, of Allegany and Kensington. Fish nets, cordage, twine of all sorts, knit underwear, carpet and duck, are made at other mills of the product known as Ramie. Hamilton Disston has now upon his Florida farm several acres of Ramie; some of it is being grown in New Jersey, and a small quantity is raised in South Carolina and California. But the greater portion of it is imported from China. Williams & Co. of New York have just contracted for three tons a day. Chicago has started an opposition company, but this has failed so far to place its contracts for a regular supply. All this has shown a growing demand for the staple. The workings of the fibre on woolen mill machinery was demonstrated in June and July, 1890, in Mr. A. M. Ulman's mill at Waveland,

Miss. Mr. Ulman was unable to obtain a regular supply of the fibre, but he manufactured some very fine woolen goods with Rhea as also some with Rhea and wool mixed in the warp in various proportions. Some of these goods were sold in New Orleans and others in the West. Mr. Ulman thinks that mixing Rhea with the wool is a decided advantage to the goods. The goods are stronger for it and take a more glossy finish."

The time is now come when Rhea pushes itself upon attention as a most important accession to agriculture. This is made apparent in the report of C. R. Dodge, special agent, U. S. Department of Agriculture (Report No. 1, 1890, page 32), in which he says :

"Probably no one fibre interest represented in the Paris exhibition of 1889 attracted more attention than Ramie, nearly every country of any prominence which took part in the exposition either sending specimens of fibre to show the results of experiments or progress of its own culture, or commissioning representatives to ascertain the latest facts concerning it. The U. S. Department of Agriculture made a small display of Ramie, illustrating the simple fact that the plant can be grown successfully."

The only obstacles our home manufacturers say, in the way of its extensive use, are the difficulty of obtaining a regular supply, and the lack of adequate machinery and process for decorticating and degumming the fibre. Every pound of decorticated fibre now imported into the United States costs the manufacturer seven to eight cents.

These facts demonstrate that there is already a demand for Ramie fibre sufficient to make its cultivation not only profitable, but a thing to be eagerly pursued provided a practicable and economical method of preparing the fibre for market is found.

That Ramie would be a most desirable and important accession to the products of Agriculture of Jamaica, admits of no question. The profit in its production and preparation for market are the only points to be considered.

There are two elements that enter into the solution of this problem : (1) cost of cultivation and (2) the preparation of the material for

market in a rapid and economical manner, by removing the bark from the stalks without cutting or breaking the fibre and by separating the gummy adherent matters from the fibre without injuring its strength or fineness.

These desiderata have hitherto baffled all the ingenuity of hundreds of inventors. * * * * *

I propose to deal with the second element of the problem first, and that shortly, as owing to the fact that the arrangements to procure letters patent for the machinery and process which I am about to allude to have not been completed, it would be premature and contrary to the interest of the inventor to give details descriptive of the machinery and process. We will now glance at the machinery in use in Europe for the preparation of the fibre for market.

In a lecture given by the late Hon. James Cecil Philippo, M. D., who took a great personal interest in the Ramie industry, published in the Transactions of the Institute of Jamaica 1884-85, from a perusal of which I have gathered much valuable information relative to the growing of Ramie in Jamaica and elsewhere, several machines are mentioned and their capacity given as follows :

“That of Huret Lagache, it is said, can produce 400 lbs. of filament daily, and the stems yield from 20 to 30, and even (according to Favier) 34 per cent. of their weight, but they must be perfectly dry, an impossibility in the open air in Europe, where drying by artificial means and consequently extra expense is necessary. The machines of Laberie and Roland are also made to clean the dry stems. The latter, says Goncet de Mas, turns out of his manufactory three machines. The No. 1, moved by one man and costing about £60, will give 120 to 140 lbs. of clean fibre per day. No. 2, costing £88, will, with one horse, give from 300 to 320 lbs., and the No. 3, with the force of one horse-power (steam) and costing £120, will clean from 400 to 500 lbs.”

Dr. Philippo also mentions the machine and process of Moerman Lambuhr of Antwerp, who has three machines, one for crushing the stems after they had been retted and dried, No. 2 for scraping and breaking up the wood, and a third for finishing and cleaning the

fibre. The prices of his machines come up to over £300. He claims that his machines will clean from 4 cwt. to 8 cwt. of fibre per day, worth from 1s. 6d. to 3s. per lb. He states that an acre of Ramie can thus be made to return from £100 to £200 per annum. Another machine invented and sold by the Sanford Manufacturing Company of New York is mentioned as capable of producing 140 to 250 lbs. of clean fibre per working day of ten hours.

I may mention another machine manufactured in France, the capacity of which is claimed to be from 250 to 300 lbs. per day. The price of this machine is £180, to be paid for before leaving the factory, and £12 royalty per annum, to be paid in advance. At a recent trial [of a newly invented machine at New Orleans] at which were present as witnesses more than 30 merchants, capitalists and mechanical experts, the machine's capacity was proved to be 1,800 lbs. of fibre in 10 hours, and a certificate was signed by those present to that effect.

I may state that the cost of building [this] machine does not exceed £100, but the inventor purposes working his machine on a royalty on fibre decorticated.

* * * * *

All that now remains is to show that Ramie can be grown successfully and with a large profit to the planter in Jamaica. I will therefore give the actual results of Ramie cultivation in Louisiana, where, be it remembered, the plant only matures twice annually, and only grows from 5 to 6 feet in height, while in Jamaica it matures four times annually and grows much higher than in Louisiana. We turn therefore to consider the agricultural problems.

Two crops of Ramie are obtained in Louisiana per year. There is an average yield per annum of 2,000 lbs. of dry ribbon per acre. This of course is good cultivation. The inventor of the machine and process alluded to has a patch in Louisiana nearly four years old, and the following has been the cost of cultivation and average yield per acre:

COST OF CULTIVATION.

Ploughing.....	\$ 1 50
Weeding (first year) second year, 25 cents.....	1 00
Fertilizing.....	10 00
Stripping leaves from stalk by hand.....	8 00
Cutting and hauling.....	4 00
Decortication.....	10 00
Fuel (in addition to burning the hurds).....	2 00
Baling.....	2 50
	<hr/>
	<u>\$39 50</u>

AVERAGE YIELD PER ACRE.

First year.....	1,198 lbs. dry ribbon.
Second year.....	2,130 " "
Third year.....	2,200 " "
	<hr/>
	<u>5,528</u>

At 7 cents per lb.....	\$386 96
Less cost of production as above.....	\$117 00
Freight, commission and insurance.....	19 35
	<hr/>
	<u>136 35</u>
Showing net profit per acre.....	\$250 61
Showing an annual net profit per acre.....	83 53

The United States agricultural reports give an account of Roetze's experiments in cultivating Ramie at the Botanical Gardens in Jamaica in 1854, where he demonstrated under high cultivation that 1,200 lbs. of ribbon could be produced per acre at a single cutting, which ribbon, under an experiment, thoroughly degummed, yielded 34 lbs. to the 100 lbs.; when bleached, 31 62-100 per 100 lbs.

I may also state that Ramie was introduced into Louisiana from, I believe, Jamaica.

My personal experience of the cultivation of Ramie does not extend to Jamaica, but is rather confined to the Southern States of America and Louisiana particularly. When, however, we come to consider the large profits that, even in Louisiana, I have shown to be obtainable from the cultivation of Ramie, and the known superiority of your soil and climate over those of Louisiana, and taking into con-

sideration the fact that the cost of labor in Jamaica is much less than in Louisiana, I do not hesitate to say without fear of contradiction that the cultivation of Ramie in Jamaica will be far more profitable than I have demonstrated it to be in Louisiana.

So far as practical instructions on the subject of the best way to cultivate Ramie in Jamaica are concerned, I must leave you in the able hands of the Botanical Department of this island, from which source Louisiana has derived much experience and advice in the cultivation of Ramie.

In his lecture already referred to, Dr. Phillippo said: "Ere long, Ramie will prove as strong as the cotton interest, awaiting only the arrival of a Whitney to fully develop it by improved and simple machinery, and thus render it as important a factor for the advancement of the countries that adopt it, as that textile has been for the Southern States of America."

IV.

CACAO, BANANAS AND INDIA RUBBER IN COLOMBIA.

A report to the British Foreign Office, submitted to Parliament March, 1894, supplies some valuable information as to the possibilities of the cultivation of Cacao (from which chocolate is produced), Bananas and India Rubber trees in districts adjacent to the Sierra Nevada of Santa Marta in Colombia. The report is as follows:

MR. JENNER TO THE EARL OF ROSEBERRY.

BOGOTÁ, December 26, 1893.

MY LORD:

I have the honor to enclose herewith two very interesting reports that have been kindly given me for publication, if it be thought desirable, by Mr. Thomson, who was formerly Superintendent of the Jamaica Botanical Gardens. That gentleman, commissioned by the Minister of Public Works privately, was lately engaged in studying the agricultural capabilities of the districts surrounding the Sierra Nevada of Santa Marta, and the reports in

question are the result of his investigations. The first report deals chiefly with the cultivation of the wild species of cacao in conjunction with bananas, whilst the second is concerned with the substitution of various species of the indigenous india rubber tree for the valueless trees at present used to shade the cacao plant. It also points out the advantages to be derived from the combined cultivation of cacao, bananas, and india rubber. Moreover, in Mr. Thomson's opinion, there are many slopes of the Sierra Nevada on which coffee could profitably be cultivated on a large scale.

In view of the liberal laws concerning unoccupied lands, it is probable that a company with a moderate capital could find advantageous investments in the district dealt with by Mr. Thomson, where in many places, side by side with the culture already enumerated, cattle could profitably be bred for exportation to the West Indian Islands.

The climate in the cacao-growing districts is undoubtedly not suitable for northern European labor, but there is nothing in the Immigration Laws to prevent a company from introducing southern European or negro labor. On the slopes of the mountains, where the coffee plant flourishes, the climate is healthy, and plantations might be so selected as to enable the European superintendents to build their houses above the sultry plains in an agreeable and healthy atmosphere.

The Central Government are most anxious to afford every facility for the introduction of the labor and capital needed to develop the great agricultural wealth of the districts within reach of the northern coasts. Unfortunately Congress, engaged in political discussions, could find no time to consider two Bills brought before it for the purpose last year. One of those Bills would have authorized the introduction of Chinese coolies, whilst the other was to sanction a contract for the establishment in the country of 10,000 Italian immigrants. These two Bills will, I am told, again be laid before Congress in the session that opens in July next.

It will be observed that Mr. Thomson concludes his second report by the statement that "the wealth of the Sierra Nevada region throws into the shade all the Antilles."

I have, &c.,

(Signed)

G. JENNER.

Report on an Excursion to the Sierra Nevada de Santa Marta to Investigate the Cultural Capabilities of the District.

Proceeding from the seaport town of Rio Hacha to the village of Dibulla along and in close proximity to the beach, the vegetation consists to a large extent of cacti and dwarf thorny leguminous trees, which latter at the end of the dry season are mostly devoid of foliage. The direction to Dibulla is almost due west, and the distance about thirty miles. From Rio Hacha a large plain extends some thirty

miles towards the eastern extremity of the Sierra Nevada. The western extension of this plain, bounded by the Caribbean Sea and the Sierra Nevada, gradually diminishes in width to some five miles as it approaches Dibulla, and this contraction of the plain coincides with the rapid ascent of this system of mountains, that is, from a few hundred feet at its eastern limits to the magnificent summits near Dibulla covered with perpetual snow. Still farther westward this narrow plain extends, with the exception of several transverse ridges, about forty miles towards Santa Marta, where the ramifications of steep mountains project into the sea.

The broad Rio Hacha plain, excepting on the lands within a few miles of the mountains, is a comparatively arid region, having a scrubby parched vegetation. Throughout this plain, it may be mentioned, 4,000 tons of divi-divi are collected annually for export, besides as much more left on the ground to rot. On this plain another plant grows wild in great profusion (many millions), viz., henequen ("agave rigida").

From Dibulla on the seaside to the base of the Cordillera the plain ascends to about 150 to 300 feet. It is covered with forest, as are the slopes of the mountains up to 8,000 and 10,000 feet, the exception being some considerable clearings between 3,000 and 8,000 feet in the Arauja Indian district. In close proximity to the sea the soil is largely composed of sand, but on receding a mile therefrom a deep loamy soil on a flat swampy belt affords a congenial site for a magnificent forest of palms—an impressive scene of tropical luxuriance. From these palms to the foot of the hills the forest consists chiefly of huge exogenous trees growing somewhat widely apart for a tropical forest, together with an exceptionally thick undergrowth. Many rivers and innumerable quebradas (ravines) connected therewith cross the plain. Here, too, the soil, over which a blue limestone abounds, is extremely rich and fertile. It was here, about two miles from the base of the hills, that I first observed the cacao tree.

The important fact with regard to these trees is that they are of spontaneous growth, and therefore wild cacao, the original Theo-

broma cacao. Still nearer the hills I found the tree dispersed on all sides.

At another point, some half-a-dozen miles to the westward, while crossing the plain in the direction of the highest summits of the Sierra Nevada, this wild cacao I found to be a predominating, or characteristic, species of the forest undergrowth. Here I traversed a zone of cacao not less than eight miles wide, thus distributed on the plain as well as on the lower slopes of the numerous spurs of the mountains ranging from 300 to 1,300 feet above the level of the sea.

At Don Diego and still further to the west, a distance of about forty miles from Dibulla, cacao is found in the forest under precisely the same conditions as those described. And I am assured that all along the base of the Cordillera to Trienta, where the eastern extension of the Sierra Nevada disappears, cacao equally abounds. Thus a continuous distribution from beyond Don Diego to Trienta of about one hundred miles. This great cacao zone is entirely uninhabited, and the lands, though obtainable for a few reals* per hectare, "terras baldias" (unoccupied lands), are unsought for, their value being wholly unknown. Moreover, the existence of wild cacao seems to have escaped attention.

Under the dense shade of the great forest trees, eighty feet high, with trunks five and six feet in diameter, the cacao presents an aspect totally unlike its cultivated congener. The matured cacao trees attain a height of from thirty-five to forty-five feet, with slender trunks devoid of branches to within a few feet of the top; and these trunks are as straight as those of a palm tree. All the mazorcas (pods), with few exceptions, are borne among the sparsely foliated branches at the summit. Besides the full-grown trees, others exist in all stages of growth, hundreds being scattered over a hectare of land. The excessive shade has imparted a weird and ill-proportioned appearance to these trees, many of which, drawn up towards the gleams of light, are not thicker than a walking stick, though twenty feet high. Not only have these cacao trees to struggle under the

*At the present exchange a real is worth about 2*d.*

unpropitious shade of gigantic trees, they have also to contend with numerous minor rivals—an aggregation of species which constitute a tropical undergrowth.

The productive capacity of these trees is very variable; some, more favorably situated, yield as much as 10 and 12 lbs. of cured cacao, but the great majority yield insignificant returns. It is to be regretted that trees with good crops of fruit are very frequently cut down, this being the easiest means for securing the crop.

Among the cacao trees there is no variation whatever in the general form and size of the fruit. The predominating color is yellow, though mazorcas (pods) of a reddish hue are not uncommon. It is interesting to note that the seeds on section are perfectly white. All are undoubtedly one true specific type, a fact of great interest to cacao planters, for apart from the advantages of identity in the process of fermentation, new varieties must eventually evolve either by variation or by cross-fertilization.

Several attempts have been made to bring these wild trees to a state of cultivation. I understand that the first efforts in this direction originated at La Loma many years ago. This attempted cultivation has been confined to the removal of the thick undergrowth which surrounds the cacao tree, and afterwards, at intervals of a year or more, cutting down the weeds that spring up. The result of these operations, though effecting some improvement in the production of fruit, cannot be considered satisfactory, for the great obstacle to the development of the plant, namely, excessive shade, remains intact. However, by the operations in question, some relief has supervened; but the advantage gained is immaterial when it is remembered that 10,000 full-grown trees yield only 1,200 lbs. of cacao per annum. Though some of these trees yield excellent results, the great majority of them are practically non-productive.

At a distance of about two miles from La Loma an industrious Frenchman has taken up the reclamation of the wild cacao on the lines adopted on that property. He has during two years cleared the undergrowth over more than 100 hectares, leaving the large forest trees; thus the cacao trees, which formed a part of this under-

growth, have been carefully preserved; and, moreover, one or two experiments are being initiated, such as supplying vacancies where the wild cacao plants were wanting, and topping trees of moderate size in order to induce them to branch at a convenient height. Notwithstanding these trials, it seems impossible to conceive trees which have emerged from the conditions of forest life accommodating themselves to the changed habits requisite to bring them into a state of remunerative productiveness as is the case with systematically cultivated cacao, for cultivated trees from the outset are made to flourish. Having been particularly requested to give my opinion as to the prospects of this enterprise, my reply was not encouraging. I, however, suggested, as a remedial measure, the destruction of some of the large forest trees at given intervals so as to command more light. With a more abundant admission of light, no doubt some benefit would accrue, but the advantages attendant upon the establishment of scientifically-formed plantations would far outweigh that derived from such partial improvements.

It is well known that cacao under cultivation is a shade-loving plant. Nevertheless, in many instances, protection from the sun is not absolutely necessary. A medium well-regulated shade is what the cacao planter should carefully establish. In Trinidad, whence more than 20,000,000 pounds of cacao are exported annually, two species of the genus "*erythrina*" are employed for this purpose. These are planted widely apart among the cacao trees, and answer the purpose well.

In addition to the attempts at cultivation already referred to, similar trials are being made on a considerable scale at Don Diego, and by another party elsewhere.

The form of the pod, besides being smaller, is quite distinct from the more elongated types of criollo and foresters, the most prized varieties under cultivation in Trinidad and Venezuela.

Though the pods in the wild type are considerably smaller than those of the best cultivated forms, it is noteworthy that in the former the seeds are larger and the pods more economically filled; thus ten and eleven pods yield one pound of cured cacao. This result

will be best exemplified by the following comparison with Trinidad cacao.

According to a treatise on cacao cultivation and curing recently issued by the Botanical Department of Trinidad, the entire contents (seeds, pulp, &c.) within the forest pod as cultivated in that island, when weighed, amount to just about four ounces, and "the pulp surrounding the seed, with the placenta, weighs nearly the same as the cleaned kernel." Thus in the Trinidad pod the seeds weighed two ounces, whereas the wild cacao seeds, similarly divested of the extraneous matter, weighed three ounces, the waste matter surrounding the seeds being considerably less than that appertaining to the Trinidad seeds.

We have, then, in the wild cacao not only smaller pods, but also an enhanced productive capacity. Besides, the superfluous pulp in the cultivated varieties is a source of inconvenience to the planter. "The pulp cannot be removed by washing before fermentation, and even after the decomposition caused by fermentation it is somewhat hard to remove." Under the favorable circumstances referred to, namely, smaller pods, and these more economically filled, consequent on the diminution of the waste matter, the wild plant, not only on practical grounds, but also on physiological principles, is capable of yielding larger crops than are obtained from the varieties in cultivation. Hence the importance of the propagation and establishment of plantations of this the original type.

In Trinidad and other cacao-growing countries great importance is attached to fermentation, as this operation imparts the requisite colour and consistence to the article. On the other hand, the method of curing the insignificant crops gathered on the plains of the Sierra Nevada is primitive in the extreme. Sometimes the pods unopened are simply put to dry in the shade until the seeds become fit for use, sometimes the seeds are wrapped in large leaves for a week and then dried in the sun, and sometimes the seeds when extracted from the mazorcas are placed in a barrel for three days and then dried, the barrel containing the cacao being placed under a roof without side-walls. Compare these simple

operations with the elaborate processes at work in Trinidad, where special houses and compartments are deemed necessary. Here is a brief quotation from the "First Prize Essay" on cacao fermentation in Trinidad (Government award):—"This sweating (fermenting) must not be regarded either as a simple process; on the contrary, it includes more or less the secondary fermentations, such as lactic, butyric, mucous, and putrefactive or eremacausis." Notwithstanding these elaborate preparations the wild cacao, as has been demonstrated by frequent exports of several quintals, holds its ground, for it was classed in the Paris market with the best Caracas brands.

Trinidad holds the first position among British colonies with regard to cacao production. But recently Ceylon has stolen a march upon the West Indian colony by the realization of far higher prices, brought about partly by excessive washing, and consequently thorough removal of the pulp, a method, however, that reduces considerably the weight of the produce, and partly by propagating exclusively from one or two well-defined forms. Anyhow, a difference of thirty per cent. in favor of the Ceylon produced is a remarkable event. Of course the Trinidad planter is not insensible to this achievement on the part of his colonial brother in the East; hence strenuous efforts are being made to improve the quality of this the greatest industry of the island. Lands for cacao cultivation in Ceylon are not available to any great extent. But it is no exaggeration to say that if the lands occupied by the wild cacao at the Sierra Nevada were obtainable in that colony such lands would be bought up at once for more than 100 dollars (paper) per hectare.*

The treatise on cacao above referred to says of Trinidad:—"If land can be found on the banks of a stream or river where there is considerable depth of alluvial deposit, such a position, if capable of being well drained, is a sure source of wealth to the cacao planter." This is tantamount to saying that such ideal sites do not abound. How infinitely superior are the innumerable sites for plantations at the foot of the Sierra Nevada, sites which nature has disclosed.

*About £8 at the present exchange.

In two reports of mine, published by the Colombian Government, I strongly advocated the introduction of cacao seeds from Trinidad with the view of ameliorating the degenerated plantations of the interior. The result of my excursion to the Sierra Nevada, as reviewed in this report, completely nullifies my former impressions as to the advisability of importing these seeds; now the conditions are reversed, the wild cacao being "par excellence" the kind for cultivation throughout the Republic.

In those countries in which this product has become a staple the yield per tree hardly averages $1\frac{1}{2}$ lbs. With our wild cacao I feel sure that under careful cultivation that average can be doubled, though in making an estimate of returns I prefer to curtail this prospective average. The cacao planters of Tolima, where millions of pounds are cropped, annually obtain an average of little more than $\frac{1}{2}$ lb. per tree. Hence, the replanting of the degenerated fields of the interior, as well as the extension of this cultivation, with seeds from the Sierra Nevada, is a measure the importance of which cannot be overrated. Arrangements could be made for the acquisition of these precious seeds on a large scale. On this point I may add that, on my recommendation, a gentleman who is planting cacao largely among his highly cultivated banana plantations near Santa Marta has already taken steps to obtain a supply of seeds of the wild type.

During my sojourn on the Sierra Nevada I visited a roza (cultivated field), on which a few trees of the wild type were under cultivation. These are old trees, growing at the considerable altitude of 3,100 feet above the sea, and they are fully exposed to the sun. The owner assured me that he frequently obtains a crop of 12 lbs. cured cacao from a tree. Unlike their congeners in the forest, the cultivated plants are well furnished with branches from the lower part of the trunks.

The cacao planter at the coast directs his attention exclusively to the production of this commodity for export, whilst the cacao planter of Tolima and other interior provinces finds a ready market on the spot, in consequence of the large domestic consumption. The latter planter, indeed, commands an abnormally high price, owing to the

supply not adequately meeting the demand; thus, prices actually rule higher than in Europe. The planter at the coast, however, possesses the great advantage of cheap transport to the markets of Europe, an advantage equivalent to some 3 pesos (about 5s.) per arroba (25 lbs.)

From the foregoing observations it will be seen that my convictions are in no way favorable to the irregular and ungenial attempts at cultivation being pursued with the wild cacao in the forest. No doubt some improvement could be effected by cutting down large forest trees at given intervals, but even in this case I cannot anticipate results at all comparable to those obtainable from well-devised practical methods involving the clearance of the entire forest so as to form new plantations, and this, too, not with the natural seedlings of the forest, but with specially propagated plants obtained from the wild stock.

The latitude of this wild cacao zone is just over 11 degrees. Consequently the following extract from "Humboldt's Personal Narrative of Travels" is peculiarly interesting: "The tree which produces the cacao is not at present found wild in the forests of Terra Firma to the north of the Orinoco; we began to find it only beyond the cataracts of Ature and Maypure. It abounds particularly near the banks of the Ventuari, and on the Upper Orinoco between the Padoma and the Gehette. This scarcity (absence?) of wild cacao trees in South America, north of the latitude of six degrees, is a very curious phenomenon of botanical geography and yet little known. This phenomenon appears the more surprising as, according to the annual produce of the harvest, the number of trees in full bearing in the cacao plantations of Caracas, Nueva Barcelona, Venezuela, Varinas and Maracaibo is estimated at more than 16,000,000. The wild cacao tree has many branches, and is covered with a tufted and dark foliage. It bears a very small fruit, like that variety which the ancient Mexicans called 'thalcacahualtl.' Transplanted into the Conucos of the Indians of Cassiquiare and the Rio Negro, the wild tree preserves for several generations that force of vegetable life which makes it bear fruit in the fourth year."

The question of selecting a tree to afford shade to the cacao plantations is extremely important. As we have seen, a useless tree is planted for this purpose in Trinidad and elsewhere. In the earlier stages of the plantations maize, bananas, etc., suffice for shade. Later on, a tree of rapid growth with a semi-umbrageous habit is required. In Colombia there are various species of indigenous caucho (rubber) which merit the attention of cacao planters. I understand that a valuable species easily propagated grows on the banks of the Rio Sinu. This, as well as other kinds of caucho, should be tried. Zarrapia ("dipterix odorata"), indigenous in the llanos, is another tree worthy of attention. The establishment of economic shade trees, destined to yield important subsidiary crops, is a matter of the utmost consequence to the progressive development of the cacao enterprise in this country. I may here mention that I called the attention of several of the gentlemen engaged in banana and cacao cultivation near Santa Marta to the utility of substituting such shade for the ill-adapted trees they have chosen, one of which being "*Pithecolobium saman*."

Reference has been made to the cultivation of cacao in conjunction or intermixed with the banana. This latter has now become an established industry at Rio Frio, where the plantations are being constantly extended with commendable enthusiasm. Though the industry is in its initial stage, a steamship is despatched fortnightly from Santa Marta with a full cargo comprising from 13,000 to 15,000 bunches. The plantations present a most luxuriant aspect, the result of admirable cultivation—a cultivation in which irrigation plays an important part. Throughout hundreds of hectares of these plantations cacao has been planted contemporaneously with the banana. The overpowering growth of the latter, however, has checked to some extent its less exuberant companion, which has consequently suffered. Besides, in the hurry of cropping the banana, cutting them down, etc., the cacao is often injured. The progress made by much of this cacao in the course of four years is hardly greater than should be obtained in two years were the plant grown under congenial circumstances. As a means of alleviating the cacao I have made the

suggestion to establish the plants in nurseries, there to be transplanted several times until they become vigorous and several feet high, at which stage they can be safely transferred to the plantation ; also for the general welfare of the cacao I recommend that the bananas be set at greater distances apart so as to ensure more adequate light and free circulation of air.

It will thus be seen that the establishment of the two products conjointly presents some difficulties. Both are planted equidistantly. At Rio Frio a modification of the present system would no doubt prove a preventive to the injury sustained by the young cacao trees. At the same time it must not be assumed that cacao will flourish with its wonted vigor when cultivated conjointly with a plant that is in some degree antagonistic ; in other words, the cacao is suppressed in the shadow of a stately mass of great banana leaves. On this account, probably the cultivation of the banana among cacao should be limited to three years.

Report on the Cultural Capabilities of the Sierra Nevada of Santa Marta.

With reference to my visit to the Sierra Nevada of Santa Marta in the month of May last, I now furnish another report on its cultural capabilities, especially with regard to the banana and caucho (rubber) cultivation on the plains, and coffee on the hills.

Barranco.—This large property, the cultural resources of which indicate those of the entire plain, is situated midway between Rio Hacha and Dibulla. It extends from the sea, by which it is bounded, towards the foot of the Cordillera. The Rio Enea forms the western boundary along about nine miles of its course. This river is navigable for small craft throughout the year. The area of the property amounts to 18,092 fanegados—more than 26,000 acres. For general cultural purposes the best lands on this property are located several miles distant from the sea, where many thousands of acres are well adapted for cacao, banana, rubber and other valuable products.

In proximity to the sea, the characteristic feature of the Barranco lands answers the description conveyed in my letter of June 26 :—

"The Rio Hacha plain, with the exception of the lands within a few miles of the mountains, is a comparatively arid region, having a scrubby parched vegetation."

The cultivation of bananas on a commercial scale is a new industry in Colombia. Costa Rica and Jamaica are the principal sources whence the United States is supplied with this fruit. In Jamaica it is now the most important article of export, having in recent years outstripped the former great staple industry—sugar. In 1889-90 the value of the bananas exported from that island was £446,974, the number of bunches being 4,729,037. In the following year, 1890-91, the value increased to £638,974, the area under cultivation amounting to 9,097 acres. Now that this industry has been fairly inaugurated in Colombia, the rich soil on the plains of the Sierra Nevada may well vie with Jamaica: indeed, judging from the large extent of cultivation already established in Rio Frio, this new enterprise claims a position amongst competitors. At Rio Frio irrigation is resorted to, the locality being subject to prolonged droughts, but the influence of irrigation is abundantly demonstrated by the remarkably luxuriant aspect of the plantations, and the splendid crops of fruit. Already some 13,000 bunches are being exported fortnightly, and this number will be greatly increased shortly.

As to the fertile lands of the inland portions of Barranco, no more eligible region for the cultivation of bananas is conceivable. Here, near the base of the mountains covered with forest, the climate is humid, consequently irrigation is unnecessary. In the event, however, of exceptional droughts, the fine Rio Enea can be turned to account with the utmost facility. It is essentially requisite that a sufficient area be planted with bananas so as to maintain a steamship service fortnightly, as is the case at Santa Marta, for it is found that crops of this fruit are fit for cutting every fortnight, and if not accordingly cut, great loss ensues. A steamer carries from 13,000 to 20,000 bunches. To maintain a fortnightly service some 300 hectares of bananas would have to be established. This extent of cultivation (750 acres) represents one-twelfth of the total area under cultivation in Jamaica, and correspondingly, one-twelfth of the value of the

Jamaica crop, viz: £53,248. This latter sum is, therefore, the value of the banana crop obtainable from 300 hectares, £177 per hectare, in that island. This estimate of returns may safely be taken as a criterion for the productive capacity of the Barranco lands.

At Rio Frio the estimate for preparing the land and cultivation, including irrigation, until the plant becomes productive at about the end of a year, is from 150 pesos to 200 pesos* per hectare.

In my previous report I referred to the cultivation of rubber as a shade tree for cacao in lieu of the useless tree everywhere employed for this purpose. Under this system of cultivation the rubber is distinctly a subsidiary product, cacao being the primary object. For the purpose of affording shade the rubber trees are set widely asunder, some twenty to the acre, thus on a cacao plantation of, say, 302 hectares (750 acres), 15,000 rubber trees.

The importance of rubber cultivation is universally admitted. I will therefore propound a scheme for its cultivation on a principle that will ensure the production of rubber under the most advantageous circumstances. My proposal is to form systematically planted rubber and banana plantations, both to occupy the same land, and to be duly interplanted in accordance with the requirements of the respective plants. No difficulty stands in the way of carrying out this dual cultivation, neither plant possessing any predominant influence injurious to the other, at any rate during the first five years, after which smaller crops amounting to from 10 per cent. to 20 per cent. may be placed against the bananas.

The rubber tree is set much wider apart than cacao is among bananas, and after three years' cultivation it will have attained a height exceeding the bananas.

The two plants may be cultivated in companionship for some ten years until the rubber begins to yield crops. We have thus a great plantation of rubber resulting from banana cultivation, a plantation ready to yield a precious commercial substance just at the time when the banana may be said to have run its full course of productiveness. With the different important species which it is advisable to establish,

* £12 to £16 at present exchange.

an average of about 90 trees per acre will result; consequently, a plantation having an area of 300 hectares would contain 67,500 trees.

Between the tenth and twelfth years the rubber trees would yield returns sufficient to cover the then current cost of their cultivation.

Between the twelfth and twentieth years each tree would yield at least two pounds* per tree annually. Subsequently, and for more than half a century, it is quite safe to estimate the returns at double the foregoing, that is, four pounds per tree. From 67,500 trees, or better to say 60,000—allowing for unsatisfactory specimens—two pounds per tree would be harvested annually, or four pounds bi-annually. From the twelfth to the twentieth years, therefore, we have an annual crop from 60,000 trees of not less than 120,000 pounds, which at two shillings per pound, or four shillings per tree yearly, amounts to £12,000. Deduct from this for working expenses say, £3,000. Hence a net profit of £9,000 per year. From the twentieth year onwards, £24,000 per year would be realized from the crops, less for working expenses, etc., £6,000, thus a net profit of £18,000 per year.

It is to be hoped that this highly important product will be taken up on a very much larger scale than is here indicated, viz.: 120,000 pounds per year. By way of illustration I would mention that in Ceylon there are several tea plantations each of which produces more than 500,000 pounds of tea per year. And dozens of plantations aggregate more than 200,000 pounds each. Some of these plantations have more than 1,000 acres each in tea, and as much more in other cultures.

Forty years ago the consumption of rubber was quite insignificant; now the United States and England each import about 15,000 tons, valued at more than \$30,000,000.

Brazil, the greatest of rubber-producing countries, has not yet inaugurated systematic planting. In the more accessible and inhabited districts some commendable efforts are being made to conserve the tree after it is tapped, but beyond these accessible limits the

*Mr. Morris, the Assistant Director of Kew Gardens, says the *Castilloa* trees at ten years old yield four pounds to seven pounds of rubber.

irregular distribution of the plant, together with its remoteness, precludes the possibility of the general adoption of this conservation; from which system, moreover, only small crops are obtained after the first general extraction. Hence the necessity of resorting to systematic cultivation.

The enterprising planters of Ceylon have been the pioneer cultivators of rubber. Difficulties and disappointments have been experienced, for everything had to be found out by experiments. It may be noted, for instance, that some of these shrewd planters even went the length of growing and commending the cultivation of the Ceará rubber tree as a shade for cacao, the climatic conditions requisite for each plant being absolutely dissimilar. Two years ago the area of all the species of rubber under cultivation in that colony was 454 acres.

According to report, rubber cultivation has been successfully initiated in Mexico, where the species experimented upon becomes productive in five or six years.

The Government of India has authorized the establishment of plantations of the species indigenous there, viz., *Ficus elastica*.

Colombia has likewise made a beginning with a valuable indigenous species planted near Chaparral at a height of about 6,000 feet above the sea; and it grows with remarkable rapidity.

The following extracts relative to rubber and its cultivation are culled from the most reliable sources:—

The Pará Rubber.—Dr. Zimen, the distinguished Director of the Ceylon Botanic Garden, in his report for 1890 says: "That the yield of rubber is improving as our trees get older, is evidenced by a further experiment made at Heneratgoda during the past year by the conductor. The tree selected was the same one as was tapped in 1888, the results of which were recorded in my report for that year. This is now thirteen years old, and its stem girths four feet eleven inches at a yard above ground. It was tapped on seventeen days: on seven days in January and February, on six days in July and August and on four days in November and December. The method followed was to smooth the surface by scraping off a little of the

outer bark to a height easily reached, and then to make with a three-quarter-inch chisel, numerous V-shaped incisions. At the foot of the trunk cocoa-nut cups were fastened with clay, and the milk conducted into them by little ridges of clay. Most of the milk, however, dried on the tree in tears. The tapping was done in the afternoon and the rubber collected in the morning. From the tree (which yielded nearly two pounds in 1888), we obtained this year two pounds ten ounces of good dry rubber, partly in sheet, but mostly in tears. The tree appears none the worse for the operation, and I consider the result very encouraging. The whole cost of collection was under a rupee, and of course on operating on a large number of trees in a plantation this would be very greatly reduced."

Mr. Clements Markham, well known for his services in connection with cinchona introduction into India, etc., writing on the subject of the *Castilloa* rubber, a valuable species indigenous to Colombia and Central America, a species the Government of India had determined to introduce to that country, says: "Mr. R. Cross left England on May 2, 1875, and reached Panama on the 26th of the same month, my instructions to him being to make the collection on the isthmus He ascended the Chagres river in a canoe, and then made a journey on foot through the dense forest into the heart of the Ule district. He found the *Castilloa* saplings growing on the banks of streams with their roots often running down to the edge of the water. They abound in rich soil along the base of the hills, and are often met with on the summits of ridges; everywhere except in swampy ground. The trees, which proved to be the species named by Mr. Collins,[†] *Castilloa* Markhamiana, are from 160 feet to 180 feet high, with a diameter of five feet, and a yield of 100 pounds of dry rubber."

The same writer in continuation of his observations relative to the valuable species of rubber, refers to the Ceará rubber (*Manihot Glaziovii*), plants of which Mr. Cross also procured for India. The following extract refers to the climatic and other conditions in which the plant grows: "South of the Amazonian forest there is a region known as Sartao or wilderness, extending in a broad belt from the

Parnahyba river to the Sao Francisco. The province of Ceará is within this belt, a high rolling plain, broken by abrupt elevations and chains which are, in fact, outlying fragments of the great central tableland of Brazil. The only high forest is found on these mountain sides, the summits and the plains below being occupied either by their forest growth, or by pastures and sandy tracts, with groves about the river courses. From June to December the climate is exceedingly dry, and the streams and rivers disappear except along the mountain sides." Mr. Cross himself in a letter to the Under Secretary of State for India, says: "The Ceará tree is not delicate, and will grow and produce rubber in situations where other kinds of plants would be dried up. For these reasons, it is likely to prove a valuable plant in India in parched up regions and stony unproductive lands thinly covered with soil." Again, "Neither grass nor weeds grow under the trees."

As previously mentioned in these reports, extensive tracts of this large plain (including Barranco) are distinguished by a scrubby parched vegetation. This is exactly the condition applicable to the requirements of the Ceará rubber tree, and it would be impossible to secure a more eligible district. In this connection I may mention that I have had opportunities of practically knowing the habits of this species, having many years ago introduced a few plants of it to Jamaica, where I grew it in both humid and arid localities. I also introduced it to Colombia and planted it at Chaparral, in the wet soil and climate of which it perished. I may further mention that I introduced the Parà and the Castilloa rubber trees to Jamaica; now these are but denizens of the Botanic Garden.

The important point as regards this district is, that the "parched scrubby vegetation" covers the country so scantily that the Ceará rubber can be planted without the necessity of clearing the existing growth, that is to say, the seeds of this tree have merely to be set in the ground among the scrubs without any other preparation than sometimes chopping down with a cutlass a bush or two that may be in the way of sowing the seed. In this way the cost of planting an acre (200 to the acre) need not exceed two dollars. The seeds ger-

minate under certain conditions immediately, and spring up with wonderful rapidity, that is, in the course of a year they grow six feet to ten feet. And for their subsequent cultivation two dollars per acre per annum—a liberal allowance—would suffice. A thousand acres would contain 200,000 plants, and after ten or twelve years one pound of rubber per tree would be harvested annually, or, say only 150,000 pounds, a return that would be greatly enhanced later on. The quality of this rubber may be judged from the following: "An authoritative report received from Messrs. Lewis & Peat valued a sample consignment of Ceylon Ceará at from two shillings nine pence to two shillings ten pence per pound." Again, "One sample parcel of Ceará rubber has, as previously mentioned, realized four shillings per pound."

At one shilling six pence per pound (a moderate price) the returns in the twelfth year from the sale of 150,000 pounds of rubber would be £11,250. Deduct from this amount for harvesting and transport expenses, £3,250; thus £8,000, less for planting and up-keep during twelve years, at £6 per acre (1,000 acres), £6,000. From the twelfth year onwards the annual value or profit from the crop will be, after deducting £3,250 for working expenses, £8,000.

The three species of rubber I have referred to, comprise the most valuable commercial kinds of tropical America, and America stands pre-eminent in all that relates to rubber. The other best known kinds are *Ficus elastica* of India, and the *Landolphias* of Africa, species of secondary importance. Colombia possesses in the remote regions bounding the head waters of the Amazon and the Orinoco valuable, and at present scientifically unknown, species of rubber. In the territory of Caquetá, for instance, a highly valuable kind abounds. Hundreds of arrobas of this have been extracted from the locality, and this notwithstanding the extraordinary difficulty of transport. The high prices obtained for this rubber in New York sufficiently determine its quality. From what I have ascertained it is in all probability the produce of *Hevea*, the Pará rubber genus. There is another important rubber tree found in large quantities on the llanos of San Martín. This sort is being exported to a considerable extent,

roads or tracts having been made through the forest to facilitate its transport; this may be another species of *Hevea*, but from the description I have had of it it is probably not identical with the *Pará* species. Writing to the Secretary of State for India, a gentleman who has penetrated to the head waters of the Orinoco, says: "I found it (*Hevea*) very abundant high up on the Orinoco above the junction of the *Guiavare*." This points to the *Hevea* being indigenous to Colombia. Another species is found on the banks of the *Rio Sinu*; this is probably the *Castilloa*. Seeds of all these kinds can no doubt be obtained in abundance. These brief allusions to the rubber species of Colombia, and there is another important kind that grows on the high mountains, point in a manner not to be mistaken to the unequalled, or, at least, unsurpassed resources of this country for rubber cultivation. In this connection it may not be amiss to add that it behooves tropical America to repel the following prediction of an eminent writer on tropical agriculture: "Indeed, there is every probability that in the long run, as with cinchona so with caoutchouc, it is upon systematic plantations in the Old World that we shall have to depend for our supply." This writer does not venture to reclaim coffee, which is a triumph of the New World. But even in the case of cinchona barks the Old World cannot grow them like the New; for those cultivated in Colombia are the richest in the world, notwithstanding that one of the species thus distinguished has actually been grown from poor East India seed. As to rubber, no doubt the best quality will continuously come from tropical America.

There is one acknowledged difficulty that stands in the way of rubber cultivation. I refer to the long lapse of years before the crops are assured. From the point of view of a tropical planter, 10 or 12 years to await for returns involves hesitation. On secondary thoughts this should be no real difficulty. Be this as it may, I have in this report planned a method calculated to overcome this objection, that is to say, the intervention of banana cultivation.

It has been shown that in the midst of a large banana plantation another great plantation can be simultaneously established, a planta-

tion comprising various species of rubber, and this is practically exclusive of cost after their propagation. Also intimately associated with this latter undertaking, another great plantation of rubber (Ceará) can be created on adjacent waste lands at a minimum cost. Thus rubber plantations, respectively consisting of 67,500 and 200,000 trees, both of which are estimated to produce when 12 years old rubber valued at £17,000 a year. And 8 years later £26,000. These estimates have been arrived at after careful consideration, always keeping in mind moderate estimates.

As these rubber plantations are to spring from the banana enterprise, the first step to be taken is to inaugurate this latter cultivation. Three hundred hectares being a large area, at least two years would be necessary for clearing and planting same. In these operations \$200 per hectare should be estimated, and subsequently for maintaining the plantations \$100 per hectare per annum. Also, for superintendence, &c., \$10,000.*

A steam launch with barges would be required to carry the fruit down the river to the steamer lying off the land. And a few miles of light tramways should be constructed in parallel sections through the plantation, so as to facilitate the carriage of the fruit to the river.

The value of the crops, taking the Jamaica average before referred to, would be £177 per hectare per annum; for 300 hectares, £53,248.

Nearly all the work in connection with the plantations can be performed on the contract system, but as labor is not available on the spot a liberal rate of wages will have to be fixed in order to induce peons to settle on the property.

During the last few years coffee has become the most important article of export from Colombia, and its cultivation is rapidly assuming large dimensions. But the expansion of this cultivation is mostly confined to districts remote from the coast. In this important movement the Sierra Nevada, with all its advantages of situation, has taken no part, except perhaps at the point where this system of mountains is severed from the Andes. The slopes of the Cordillera,

* These sums indicate Colombian paper currency, at present \$12.50 to the £1.

as compared with those of the Andes, are steep and precipitous in many parts. But numerous sites, in point of adaptability, equal to those available on the Andes may be selected here. Here coffee is placed in similar climatic conditions at 1,000 feet nearer the sea-level to those on the mountains of the interior, from 5 to 7 degrees nearer the equator. At the foot of the Sierra Nevada, where one or two small plantations are being formed, I observed at a height of only 200 feet above the sea one of these plantations yielding a fine crop to be harvested just when two years old.

Selections for sites should be made on the slopes of the mountains, not on the hot plains, at from 1,500 to 4,000 and 5,000 feet above the sea.

At a short distance from Barranco, but separated by the tractless forest, is situated Cueva, the mountain property appertaining to the former. Here some excellent sites rising to 5,000 feet are available for coffee. This cultivation, in connection with the projected great plantations on the plains, merits special consideration. Among other advantages that of locality is most favorable when it is remembered that 5 pesos per quintal (about 8s. per cwt.) is no uncommon price paid for the transport of coffee from the interior to the coast. Moreover, it is both interesting and useful to have in connection with and in the immediate vicinity of the hot plains another cultivation established in the genial temperature of the mountains.

On the lower sides, as well as on the hot plains, a different species of coffee, namely, the Liberian, would find a fitting home. This species is well worthy of extensive patronage.

Having dealt in this report with the utility of embarking upon the cultivation of some of the most valuable of tropical products, it should be also noted that other specific elements of wealth await development in this district. For instance, cattle farming has always been one of the most profitable investments in Colombia. Other precious products also claim attention, such as the extensive planting of cocoanuts, which, after being planted, take care of themselves. Of cocoanut products Ceylon exported in 1890, in the form of fruit,

oil, copperah, fibre, &c., to the value of 7,949,727 rupees. And a considerable proportion of this comes to the United States. Besides this extent of export, as an article of diet the produce of 16,000,000 nuts are consumed locally. It may also be mentioned that recently the manufacture of cocoanut butter has become a great industry in Germany.

In conclusion it may be observed that this region, the resources of which have been so favorably reviewed in this and in my previous report, is in itself phenomenally rich in spontaneously distributed vegetable products. If we turn to the large West India islands, with which in some respects it may be compared, for, presumably, it must have narrowly escaped becoming an island, being completely isolated from the Andes on the one side, and bounded by the ocean on the other, none of these has ever exhibited such expansive spontaneous indigenous wealth of vegetable commodities valuable to commerce. Thus apart from products of minor importance may be mentioned the occurrence of wild cacao in great profusion, divi-divi spread over the plains and yielding many thousands of tons of its legumes for annual export, and henequen (*Agave rigida*) capable of yielding fibre also to the extent of many thousands tons annually. These islands (plantation colonies) were first of all made prosperous by slavery, and by the almost exclusive production of sugar for which this slavery was begotten. But sugar-cane cultivation can no longer be pronounced the privileged product for adoption by these regions. Instead of that, cultivation for more lucrative objects to meet the demands of commerce are now allotted to this new region, the Sierra Nevada; the physical features of which, moreover, offer great contrasts to and throw into the shade all the Antilles.

V.

DEVELOPMENT OF BRITISH GUIANA.

A report to the British Foreign Office from the Governor of British Guiana gives some interesting information as to the trade and industrial development of that colony.* The report begins by saying:

“The financial year of the Colony being now the twelve months ending on the 31st March, it has been deemed convenient to alter the Blue Book year correspondingly. The volume under review, therefore, deals with the twelve months immediately preceding the 31st March, 1893, and when the results shown during that period are compared with those of the ‘preceding year,’ the latter must be taken, unless otherwise stated, to mean the calendar year 1891. Except in a few instances, the statistics for the first three months of 1892 have not been printed, as those for the following twelve months afford all necessary basis for calculation and comparison.”

The report continues:

“Important labors fell to the Combined Court of March, 1892, when assembled in Committee of Ways and Means. The Government of the United States having refused to admit the argument put forth by British Guiana, that her customs duties, being imposed for revenue purpose alone, and being neither protective nor differential, could not be regarded as reciprocally unequal or unjust, and having demanded the surrender of duties on United States products amounting to £29,000, as reciprocity for the admission of her sugars duty free into the United States, it became the task of the Combined Court to replace that revenue from other sources, and so to apportion the incidence of taxation to bring under its operation those who had benefited by the remission of the duties, and who might be fairly expected to bear their share of the burden of replacing them.”

* Colonial Reports No. 101. Presented to Parliament, February, 1894.

"But it was fortunately unnecessary to provide the whole of this £29,000. The revenue of the colony from other sources had been steadily expanding, and it was found, after the estimate of expenditure for the ensuing year had been framed, that an additional sum of £17,500 would be sufficient to meet it. Of this deficiency, the planters of the colony, who are the principal beneficiaries under the agreement with the United States, at once assumed a direct responsibility for nearly one-half, to be paid in the convenient form of a tax of 2s. 1d. per acre on sugar estates, which was estimated to yield over £8,000.

"To provide the remainder of the revenue required was not difficult. An additional 5d. in the ton, on the tonnage dues payable by ships bearing the products of other countries to our improved market and enjoying the commodity of the harbor of Georgetown, was estimated to yield £4,400; the stamp duties, which had been abandoned by the Combined Court of 1891, were reimposed in the expectation that they would bring in about £3,000; and finally, as the duties remitted were in many cases too small to benefit the consumer, a contribution was levied on the middle-man by increasing the shop licenses of the several classes. From this last-named source an increased revenue of £1,900 was expected."

The revenue of the colony during the year 1892-'93 amounted to £573,463, exceeding that of the previous year by £10,300. The expenditure amounted to £542,469, being £717 less than that of the previous year, and showing a surplus of revenue over expenditure for 1892-'93 of £30,994.

With reference to immigration, the report says:

"India continues to be the only steady source of the labor supply of the colony, and 2,862 men, 1,201 women, with 630 children, in all 316 less than the year before, were introduced in 1892, and at its close the East Indian population of the colony was estimated at 109,673. Of these 71,011 were resident on estates 17,339 being under indenture, and the rest, including 16,640 children, free; the remainder were scattered about the colony in villages or engaged in other industries.

“The mortality amongst the indentured immigrants was twenty-six per thousand, and amongst the unindentured thirty-six, a slight increase on the previous year, due to the epidemic of influenza.

* * * * *

“The facilities offered by the Indian and Colonial Government for the remittance of small sums of money to friends and relations in India were largely used, and £3,080 were so remitted during the year. There stood to the credit of Indian immigrants in the savings banks of the colony £113,315, or £1 per head of the population, including children.

“Four hundred and twenty-one marriages were ‘arranged’ on board ship, and duly recorded on arrival in the colony.”

The following are statistics of imports and exports:

The imports for the year amounted to £1,780,319, or £72,550 more than in 1891, while the exports were £99,341 less than those of that period, the actual figures being £2,433,213, as against £2,532,554.

The imports amounted to £6.8 per head of the population, and the exports to £8.14.

The following comparative statement shows the direction and value of the trade of the colony in 1891 and 1892-93:

COUNTRIES.	IMPORTS.		EXPORTS.	
	1891.	1892-93.	1891.	1892-93.
United Kingdom.....	£ 927,397	£ 949,051	£1,220,518	£1,270,794
United States.....	374,985	437,395	1,109,083	980,563
British North America.....	72,106	91,012	44,825	63,820
British West Indies.....	95,128	76,993	37,987	25,019
Bermuda.....	1,109	1,014	2,464	1,177
East India.....	140,718	134,404	223	605
Foreign countries other than U. S.....	88,774	86,735	116,759	89,769
African possessions.....				486
Newfoundland.....	7,602	3,715	695	980
Total.....	£1,707,769	£1,780,319	£2,532,554	£2,433,213

The report states that the telegraph lines of the colony have been renewed in many places, and that a cable fifty-four miles in length has been laid between Georgetown and Bartica, a town at the junction of the Massaruni and Essequibo rivers.

With reference to railways and roads, the report says:

“The only railway which British Guiana has ever possessed is a short line of twenty-one miles from Georgetown to Mahaica, but for many years the question of extending it to the left bank of the Berbice River has engaged the attention of the Government and the Legislature. The general terms of an agreement have been arranged with the Demerara Railway Company, who own the present line, and it may be hoped that within three years, the Demerara and Berbice Rivers will be connected by rail, and the towns of Georgetown and New Amsterdam will be within two or three hours’ reach of each other. The extension will cover some forty miles, and the terms of construction are roughly a government guarantee for fifty years of interest at the rate of four per cent. on the cost of construction, a moiety of working profits over four per cent. being handed over to the government in discharge *pro tanto* of any moneys paid under the contract. The amount guaranteed by the government is approximately the same that is now paid as a subsidy for the steamer service between Georgetown and New Amsterdam, and the road mail service from Mahaica, the present terminus of the railway to Blairmount on the Berbice River. These subsidies will, of course, be withdrawn.

“The existing line is a paying concern. The passenger and goods receipts for the year amounted to £38,824, and the total expenditure to £21,398.

“The roads of the colony run 268 miles along the coast and the banks of the rivers. One hundred and forty-six miles are maintained by government, and cost, with bridges, £16,391. The remainder are maintained almost wholly by the proprietors of the sugar estates through which they run.”

With reference to the general outlook, the report says:

“After years of unprofitable struggle with depressed industries, the colony has emerged confident and unshaken,” and “Seldom in the history of the colony, have the evidences of present prosperity and indications of future wealth been so marked as to-day.”

VI.

COMMERCIAL AND INDUSTRIAL INFORMATION.

ARGENTINE REPUBLIC.

A movement has been started in the Argentine Republic for a system of irrigation to obviate the disastrous effects of droughts in the agricultural districts. A drought of unparalleled severity set in last November and continued until the end of January. The result was that the maize crop was a complete failure, and cattle and sheep perished by thousands. From an engineering point of view, the project is said to be entirely practicable, as the rivers and streams of the country afford almost inexhaustible supplies of water, and in the rainy season, become swollen to such an extent as to render it possible to store immense quantities in reserve tanks. Supplementing these, a system of parallel canals from various points on the rivers is advocated, as well as the sinking of artesian wells. One of the results of the recent drought has been to turn the attention of farmers and stock raisers to other portions of the Argentine Republic, which, it is thought, will not be liable to this objection. The districts affected by drought, it is predicted, will hereafter be devoted more largely to the cultivation of wheat, which does not suffer so much from its effects as do cattle and sheep and the maize crop. The production of wheat in Argentina is increasing by rapid bounds; the wheat exports jumping from 326,000 tons in 1890, to 1,000,000 tons in 1893, and it is claimed that the exports during the current year will reach 2,000,000 tons.

The official report of immigration to the Argentine Republic in 1893 serves to show that the country is steadily recovering from the depression of previous years. The arrivals numbered 110,226, and the departures 64,100, the balance in favor of the Republic being 46,126. During the previous year, 1892, the arrivals were 93,550,

and the departures 55,282, the balance in favor of the country being 38,268, or 7,858 less than in 1893. The *South American Journal* says: "This is distinctly encouraging. It is a conclusive confirmation of the fact that the crisis is lifting, and that Argentina is again entering upon an era of prosperity, which, established on a more stable, because less speculative foundation, cannot fail to be of permanent benefit to the nation. We look upon this increase of immigration as one of the most encouraging features of the Argentine situation, and it is full of promise for all who are interested in the progress of the country."

Lyman & Company, an English Steamship Company of Cardiff, Newcastle and London, have started a regular line of steamers between Buenos Aires and Europe.

The telephone line between Buenos Aires, Argentine Republic and Montevideo, Uruguay, is said to be a financial success. The profits for last year are reported as amounting to \$48,000, which enabled the directors to declare a dividend of 6 per cent.

The population of the city of Buenos Aires was estimated on January 1, 1894, at 580,371.

The Senate of the Argentine Republic was recently engaged in considering a bill to authorize the Government to take a new census of that country.

The completion of the South Coast Railway to Atalaya, Argentine Republic, has already proved of great service to the Saladeros (packing houses). Some consignments have already been sent to La Plata, and thousands of tons, it is said, are being prepared for shipment whenever the port of Rio is opened. Formerly, all this produce was sent by lighters, which sometimes could not approach the shore within a mile or so; now, the railway delivers alongside the ship.

BRITISH HONDURAS.

It appears that the people of British Honduras are contending with several obstacles in the agricultural development of that colony. "The first real honest attempt to foster the agricultural interests of

the colony," says the *Colonial Guardian* of Belize, "was made by Sir Frederick Barlee, not only by reducing the price of land to \$1 per acre, but by changing the mail route from Jamaica, with which we had no trade, to New Orleans, with which we had a large and increasing trade, and which was the greatest importer of tropical fruits in the United States." The results which might have been expected did not follow, and additional measures are now advocated. The lack of progress is attributed partly to administrative inactivity, and in a great measure, to want of population in excess of that employed in the wood industry. Immigration from Spanish Honduras, which seemed to be on the point of growing largely, has been checked, it is stated, by the inability on the part of the immigrants to secure lands on advantageous terms. It is now suggested that the price of town lots be lowered, and that surveys of grants be made more promptly.

CHILE.

The Chilean Congress closed its session on the 17th of January without taking action on the application of the contractors for building the Transandine line for an extra guarantee. The failure to act means the loss of several months in beginning the work of building the last link to connect the Chilean and Argentine sections by means of a tunnel and of some thirty miles of road. This great railroad when completed will provide transportation across the South American continent from Buenos Aires to Valparaiso. The Messrs. Clark, who are the contractors, were unable to obtain the capital to build the last link which is the most difficult and the costliest part of the road, unless Congress would agree to raise the guarantee from 4 to 5 per cent. Congress is said to have been favorable to the proposition, but its passage was defeated for the time being by obstruction tactics. The *Chilean Times* says: "It will pass, however, next session in spite of obstructionists, for the country has already pronounced in favor of it."

Four railway acts have been promulgated by the Chilean Government. One is for a narrow gauge line from Antofagasta to Aguas

Blancas, with branch lines to the Nitrate Works of that district. The second is for the prolongation of the Tongoy line from Cerrillos to Trapiche. The third is for the construction of a line from Rancagua to Peumo, and the fourth provides for the acquisition of the land necessary for the electric tramway between Santiago and San Bernardo.

Statisticians calculate the population of Chile at the end of 1893 at 3,417,000 inhabitants, in which number are included 50,000 Indians.

JAMAICA.

Information as to a number of industrial and commercial enterprises in the Island of Jamaica has been received. The subject of ramie cultivation in Jamaica has been treated in preceding pages of this Bulletin. A proposal of Mr. Plant, of the Plant Steamship Line, to establish a regular line of steamers between Florida and Jamaica, is apparently receiving strong support in Jamaica. Mr. Plant is quoted as saying: "I think satisfactory arrangements could easily be made, and the cost would not be very great, to run a steamer fortnightly for five or six months during the winter and spring season, which would undoubtedly prove a paying investment for the island. What is most wanted is regularity. A line run from Tampa should go on regular days and at regular intervals, so timed as to make connection here with the Royal Mail steamers, and this would very likely attract a large number of people. * * * I have been running a line of steamers between the port of Tampa and Cuba for several years, and I am proud to say that we have never missed a trip, although we have a semi-weekly service in summer and a tri-weekly in winter. When we commenced that service very few people traveled by steamer, but now the hotels in Cuba are unable to accommodate all the people we take down." Continuing, Mr. Plant said: "When the railway line (in Jamaica) is completed to Montego Bay and Port Antonio, which, I understand, will be about next September or October, the distance of the sea voyage will be somewhat short-

ened, and the attractions of the country considerably increased. People will have an opportunity of travelling through the island by rail, and there will not be the same difficulty in getting about from one place to another. It would also give a decided boom to the fruit trade, and fruit steamers could be easily run from Port Tampa to Montego Bay in a very short time as compared with the present voyage to New York."

The practical results of Mr. Plant's proposal, as stated by the *Kingston Gleaner*, would be the establishment of a new route for passenger traffic to and from South America and the North, the opening up of a new market for Jamaica fruits and the carriage of the Jamaica mails in four or four and one-half days to New York. It is possible also that the steamship company would establish their own hotels in Jamaica.

The Atlas Steamship Co. is said to be making an endeavor to reopen the orange trade between New York and Jamaica, and has recently asked for offers of five hundred barrels to be provided fortnightly. The difficulty in the way of developing this trade heretofore has been careless packing of the fruit.

Attention is being directed in Jamaica to the possibility of developing a trade in fruits between that island and Great Britain. The fact that the fruit trade between the United Kingdom and the Cape of Good Hope is being successfully prosecuted suggests the question whether similar results could not be obtained for Jamaica fruits. With the inauguration of the shorter passage by the Royal Mail Line, which is announced to occur shortly, it is thought that the conditions would be very favorable for such an experiment.

The efforts of Mr. Edmund M. Earle, of the Caribbean Sea Fishing Development Syndicate, (limited,) to develop the fisheries of Jamaica and contiguous waters, are still being prosecuted. Mr. Earle asks for government assistance in the shape of a money grant, and remission of duties, fees, etc. At present, large quantities of foreign fish are imported into Jamaica, and it is thought that the population can be furnished with a fresh and adequate daily supply at low prices from the neighboring waters. The

enterprise also contemplates curing and canning fish for export, the cultivation of oysters and the development of the turtle trade.

The preliminary work in connection with the drainage and reconstruction of the streets of the city of Kingston, Jamaica, has been begun, and at last advices, the engineer and his assistants were waiting for pipes and material from England to begin the actual operations. No definite decision has been reached concerning the pavement, but it is thought probable that asphalt blocks will be used in the principal streets.

The Director of Gardens and Plantations in Jamaica deals in his last report with the subject of the future of coffee planting in the island. The maximum export of coffee was reached in the year 1814, when it amounted to 34,045,585 pounds. Economic changes in the island resulted in the decline of the exports. Within a few years past, there has been some revival, but the quantity has only ranged between 8,000,000 and 10,000,000 pounds. "While storms and droughts inflicted heavy blows," says the *Kingston Gleaner*, "capital frightened, labor wanting, and competition vigorous have been the main factors in reducing our coffee exports." The Director's remedy for the prostration of this industry is stated to be "more roads and a better supply of labor." Capital, he thinks, would come if these two things could be guaranteed. A resident of one of the coffee growing districts is reported as saying: "I think that the mountain lands of Portland would be taken up for the cultivation of coffee, if the Government could see their way to making riding tracks into the Crown lands for sale. The lands should be sold for a nominal sum, say 4s. per acre, where the roads were easy, and 2s. per acre in the highest slopes, with a proviso that, say 10 per cent. of the land purchased should be put under cultivation each year for the first three years, and five per cent. for the next three years. The payment for the land should be, say 25 per cent. on possession; balance in equal payments divided over a period of six years."

The Annual Report of the Protector of Immigrants of Jamaica, supplies information as to the importation of East Indian coolies

into that island. During the past year, 480 coolie immigrants arrived. It is said that the coolies in Jamaica are satisfied with the conditions there, as is shown by the fact that many, after serving a stipulated time and revisiting India, return to Jamaica. The Protector endeavored to procure returns showing amount of stock and land in possession of the coolies, but owing to their reticence, it is stated, "the information is not so complete as it may yet become. Sufficient was obtained, however, to demonstrate that the coolies are taking kindly to the island, and are in many instances settling down and forming settlements." The work they perform is well done, and they are earning good wages.

MEXICO.

The proposed establishment of a line of steamers between Baltimore and Tampico, Mexico, is expected to produce important results in the development of trade with Mexico. The harbor of Tampico is a very fine one, and two roads have their terminals at that point, namely, the Mexican Central and the Monterey and Mexican Gulf. The experiment is to be made by the Johnstone Line, now running from Liverpool to Baltimore, of a regular steamship service between Baltimore and Tampico, and it is expected to export to Tampico the products of the Maryland and West Virginia coal mines.

A movement is also on foot for the establishment by the Illinois Central Railway Company of a steamship line between New Orleans and Tampico for the purpose of carrying the products of the United States coming out of the Mississippi Valley for Mexico to Tampico, and in order to bring the Mexican commodities of exchange back by the same route. This movement has the support of the Mexican Central Railroad, which extends from Tampico to the City of Mexico, and from the latter city to El Paso, Texas. The proposed steamship line would connect with the Mexican Central at Tampico, and receive from it commodities brought to that port. The New Orleans *Picayune*, commenting upon the project, says: "The *Picayune*, some days ago, referred to the fact that all indications pointed,

unmistakably, to the great increase in the coffee trade of this city in the near future. More frequent steamship communication with Mexico and Central America will help to bring this about, and should it be found practicable to inaugurate a line of steamers between this port and Brazilian ports, still more rapid strides would be possible in the way of increasing the coffee business."

The *Picayune*, of a subsequent issue, states that the French steamship line which has decided to place large steamers on the route between New Orleans and Havre proposes also to establish a line between New Orleans and Brazilian ports, and also between that city and the Argentine Republic. "These lines," says the *Picayune*, "are expected to afford increased facilities for the coffee trade, as well as to divert a portion of the South American wool trade in this direction. The representatives of this enterprising line propose to make arrangements to handle imports of coffee intended for the Pacific coast, as such imports can be handled more expeditiously through New Orleans than overland by mail from New York, the distance by this route being fully one-third less."

A recent number of the *Mexican Financier* expresses the opinion that, indirectly, Mexico is gaining by the low price of silver, as the demand for land suitable for coffee and other cultures is steadily on the increase, "a fact which is largely explained by the stimulus given to agriculture by the high exchange, which benefits all exporters of staple tropical products." There is said to be a movement on foot in London to bring over 5,000 colonists to settle on coffee lands in Chiapas, under the auspices of the Salvation Army.

It is stated that the Government of Oaxaca, Mexico, is endeavoring to set apart for the cultivation of coffee, without encroaching on private property, about 30,000 acres of land. "It is to be presumed," says the *Two Republics of Mexico*, "that this land belongs to the government, and that it may be purchased at the regular tariff price. If this is the case, the Governor of Oaxaca has it in his power to render the whole country a very valuable service by establishing the precedent of each State finding and surveying all the public lands within its limits. . . . If these lands are surveyed into small

holdings of from one hundred to two hundred acres, and only sold to actual settlers, they would be immediately purchased by Mexicans or foreigners. In this way, the population and the production of the State will be rapidly and materially augmented."

Mr. Lucien Plessy, a contractor from the United States, is building four frame houses, with sloping roofs, "on the American plan," for Sr. Amado Talavera, in Còrdoba, Mexico. A number of other persons are having plans made for similar houses to be built in the vicinity of Còrdoba. The *Mexican Trader* says that there is a special advantage in building these houses in the hot country, when built on high brick foundations, as they are cool and dry, not being damp like the ordinary Mexican stone houses.

"As the result of nearly three centuries of work," says the *Two Republics of Mexico*, "the great drainage system of the valley of Mexico is nearing completion." Eighteen months will see the opening of the great water-way for the escape of the imprisoned floods of the valley, which, in centuries past, have been a menace to the city and its safety. The canal and tunnel through the mountain range have a total length approaching forty miles. Nine-tenths of the tunnel, six miles in length, is now complete, and on the 5th of next May it is expected that it will be open throughout. The tunnel discharges into the Rio Panuco, and thence into the Gulf of Mexico, draining the valley and freeing it not only from the danger of floods, but from the sanitary evils which have long resulted from defective drainage. The total cost of the work will be about \$10,000,000.

Information is at hand of the perfecting of a project for Mormon colonization in Northern Mexico, which, it is stated, rivals in size and importance the first migration to Utah. A contract has been drawn up for the purchase by the Mormon Church of three million acres of land and the settlement of twenty thousand Mormon colonists. The representatives of the Mormons are A. F. McDonald, George A. Teasdale, Brigham Young and Henry Evering, of Salt Lake City, Utah. The movement is said to be the culmination of a plan by which the Mormons are to remove in large numbers from Salt Lake City to this portion of Mexico. The tract is situated in

the Degollado district of Northern Chihuahua, about one hundred and twenty miles south of New Mexico. The land is part of the highlands of Chihuahua, and lies at an elevation of seven thousand feet above the sea. It is said to be fertile and especially adapted for grazing purposes. It is also rich in timber. Brigham Young and other Salt Lake City capitalists obtained a concession from the Mexican government for the construction of the road from Deming to Guaymas, but after completing nearly one hundred miles of grading abandoned the work. This concession was recently taken up by General Mexia and Mr. Lancaster Jones, of the City of Mexico, who are now preparing to build the road, which will tap the great lumber regions of the mountains of Northern Mexico, and will open up a route into the United States to the north and to the ports of the Pacific on the west. The survey passes through the present Mormon colonies of Juarez, Porfirio Diaz, Pachecho and Dublan, in Northern Chihuahua. These colonies have been established for nine years, and are said to be in a prosperous condition. The colonists have reclaimed the wilds, and have large farms under cultivation with orchards, flour mills, cheese factories, dairies, woodenware factories and other industries. One of the Mormon agents is quoted as saying that polygamy will not be re-established in Mexico.

The City Council of Mexico has granted a concession to Mr. J. Carter, of Chicago, for the establishment in that city of a messenger service such as is in use in the cities of the United States.

Rapid progress on the railroad across the Isthmus of Tehuantepec is reported. The work is being done by an English contractor for the Mexican government, and is said to be approaching completion. It is now said that the line will be finished in July next.

A project is on foot to settle Belgians in the State of Michoacan, Mexico. Mr. I. Verplanken, a Belgian established in business at Patzcuaro, is mentioned as the promoter of the scheme. The colonists are to engage in agricultural pursuits.

MISCELLANEOUS.

It is proposed to turn a portion of the unfinished Panama Canal to account. During the stormy weather, the port of Colon is difficult of access. On the Panama side, vessels lie at anchor in the bay, and cargoes have to be lightered to and from the city. It is now suggested to utilize portions of the abandoned canal for improved harbor facilities. For this purpose, four miles on the Panama side, and about fourteen miles on the Colon end, could be rendered available, securing safe harborage for vessels, and enabling cargoes to be transferred from steamers to the cars of the Panama Railway.

At the opening of the new Congress of Uruguay on the 15th of February, President Herrera read a message giving an account of last year's administration, and enumerating the various economies which had been effected. The Budget, it is said, in spite of a decrease of revenue, "showed almost an equilibrium between receipts and expenditures."

A commercial treaty has just been concluded between France and Bolivia, according to which the latter country grants the treatment of the most favored nation to French products. France, in exchange, applies her minimum tariff to imports from Bolivia.

INTRODUCTORY.

It has always been asserted that the best means to overcome the obstacles in the way of the development of the great source of wealth offered by Central American countries, would be the encouragement of foreign immigration, inasmuch as skilled labor in various industries would furnish to the world, in the form most suitable to each country, every valuable product from her soil, many of which to-day are scarcely used; but it would be unjust to deny the constant efforts made upon a larger or smaller scale by the Central American Republics to break through the barriers that prevent their progress and aggrandizement.

It would, indeed, be unfair to accuse any of those smaller nationalities of neglect and want of energy, for some have reached a state of advanced civilization, which, to this day, has not been found in the same degree in other countries of the continent, where nature has lavished her richest gifts, and where the population is so much greater.

Liberal institutions based upon the principles of civil law, public instruction established conformably to the progress of science, flourishing agricultural enterprises, new industries, railroads, telegraphs, telephones, etc., are the means extensively promoted and used by the laborious people of Central America, in their eagerness to attract to their shores the civilized influences of the North and the intelligent activity of the artisans from beyond the sea.

If we stop to study what distinguished scientists have said in regard to those countries, we will find that Professor Griesebach* demonstrated the fact that the flora of Central America offers an extraordinary variety; that Dr. A. von Frantzius,† referring to that well-known naturalist, says, in speaking of the fauna of Costa Rica, that it would be difficult to find another country which, in such a small area, contains as great a number of distinct species; and Dr. H.

* Documentos para la Historia de Costa Rica por León Fernández, vol. 1, San José, Costa Rica, 1881.

† Ibid.

Palakowsky,* entertaining the same opinion, stated, in his studies of the flora of Central America, that nowhere on this continent, nor perhaps in any part of the world, could be found on the same soil such a variety of plants, and more especially in Costa Rica, which combines the extreme climates of the two great Americas. The mineral kingdom is not less favored. It is an evident fact that in Costa Rica and Honduras, above all, an abundance of the precious metals has been found, but intelligent management in working their rich mines, as well as the necessary capital to promote a greater development of the agricultural enterprises, are the requirements most needed in those Republics.

Costa Rica is situated in the southern part of Central America, and has the form of a long parallelogram, inclining from the northwest to the southeast, bathed by the two great oceans.

A chain of mountains runs through it lengthwise, rising in some places to more than 11,000 feet above the level of the sea, and descending gradually by great undulations toward either coast, as well as toward Nicaragua and Panama.

Consequently the configuration of the land alone offers a diversity of climates, ranging from the tropical heat of the seashore to the temperature of the summit of the mountains where water freezes.

The country was discovered by Columbus himself in 1502; but its history from that date up to its emancipation in 1821, does not offer any special features, if we except its almost complete abandonment while remaining under Spanish domination.

There was not in Costa Rica during that time a university, and scarcely any primary schools; there was no printing press; there was not a road, a bridge, or even a temple worthy of the religion instilled into the aborigines; and the period of independence arrived without there remaining of those dark days on Costa Rican territory one monument, as a reminder of the former lords.

Even in those days the number of the Indians was already considerably reduced, and the Spanish population was also very small; but neither had those bands of adventurers who had invaded other countries taken root in Costa Rica.

Nevertheless, the soil of Costa Rica was always considered one of

* Dr. H. Palakowsky, "La Flora de Costa Rica," San José, Costa Rica, 1891.

the richest on earth because of the diversity of its climate, the innumerable rivers and streams which render it fertile, the abundance of precious minerals, and the varied vegetation with which it is densely covered throughout its extent.

Columbus always entertained a very favorable idea of the wealth of the territory, and from the name given to the Atlantic coast, known from those times as the *Costa Rica* (rich coast), is derived the significant name by which the country is designated.

"And what other name could the imagination of the discoverers have found to baptize the country had those seekers after gold appreciated as a wealth greater even than that which the earth hid in its bowels, the riches which, charming and smiling, form a marvelous decoration of the picturesque surface of Costa Rica."*

"The forest, the rivers, the mines, the valleys with which it abounds, all teeming and overflowing with the treasures of nature, constitute in themselves a new world, which, in the partial obscurity which encompasses it, seems to have been reserved by a Providence of infinite views for future generations, and for an exhibition of happiness and glory which shall transcend the fortunes and achievements of this day, justly prized and applauded as they are."†

The soil is so productive that "the sugar cane comes to maturity much quicker than in Demerara or Cuba." "The ground, without manure, will afford two crops of corn in a year. Coffee grows in great perfection, and gives a very heavy crop. The soil is volcanic, or I should, perhaps, more properly say, has been the produce of volcanoes, and is indescribably fertile. And all this has been given without that intensity of heat which in these southern regions generally accompanies tropical fertility," etc.‡

"It would be almost impossible to find another country in the world where, in such a relatively small territory, exists such a quantity of first-class lands, combined with a wealth of woods and minerals."§

As regards the climate, Anthony Trollope says: "Indeed, no cli-

* N. Bolet Peraza, "Las Tres Américas," vol. 1, No. 2, February, 1893.

† Thomas Francis Meagher, "Harper's New Monthly Magazine," No. CXVII, February, 1860.

‡ Anthony Trollope, "West Indies and the Spanish Main," London, 1860.

§ G. W. Camphius, Report of the River Plate Trust Loan and Agency Company, to the President of Costa Rica, London, June 25, 1891.

mate, can, I imagine, be more favorable to fertility and to man's comfort at the same time than that of the interior of Costa Rica." *

Elisée Reclus says that it is one of the most salubrious in Central America, both for the natives and the foreign colonists.†

The greater part of the population of Costa Rica is concentrated on the central plateau, between the ports of Limón and Puntarenas, on the tenth degree north latitude.

The plateau rises from three thousand to seven thousand five hundred feet above the level of the sea.

"It can be seen that at this height the tropical heat loses its inconveniences and dangers. Reammur's thermometer stands during the whole year between 16° and 20° (68° and 77° Fahr.). This is the finest climate of the known world, and the most favorable to the development of the physical and moral forces, as well as to the productiveness of the soil.‡

Referring to the valley of Cartago, which is situated in this part of the country, Wilhelm Marr says: "It is impossible to imagine a more beautiful place than this. This lovely climate does not permit of the development of inflamed thoughts or turbulent passions. This air, this nature, are as a balsam to the life satiated with activity and with pleasure." §

In regard to the population, Elisée Reclus says that it presents a certain distinct originality from that of the ordinary Hispano-American communities; that the melting of its elements into one national unity has been accomplished there with better success than elsewhere, and its progress has been less interrupted by foreign wars and internal strife, and that in some respects Costa Rica is the model republic of Central America.¶ And M. Felix Belly says that "the population of Costa Rica is, perhaps, in its aggregate that which represents the highest plane of Christian civilization. No other human group, not even in France or Switzerland, can be compared to it in all that touches the love of work and of the family, as well as in amiable manners, coupled with quiet and calm dignity: no other has achieved

* Above cited.

† *Geographie Universelle*, vol. xvii, Paris, 1891.

‡ M. Felix Belly "Percement de l'Isthmus de Panamá," Paris, 1858.

§ Wilhelm Marr, "Reise nach Central Amerika," Hamburg, 1863, Costa Rica im 1853. *Geographie Universelle*, above cited.

such rapid advancement in the creation of public wealth and in the intelligent utilization of its natural resources."

"The Costa Rican soil," he adds, "is liberal; it returns an hundred-fold everything that is confided to it, from the grain of wheat to the grain of cocoa. But above all, it owes to the character of its inhabitants a unique aspect, which causes one to imagine a terrestrial paradise. The whole Republic breathes a certain air of well-being, of honesty and goodness. Prosperity is there a universal fact; pauperism is unknown; and abnormal beings are drawn by themselves toward the general current of morality and activity. The most scrupulous fidelity to his obligations is a virtue of the lowest native."*

"Rarely has nature granted her privileges to people who better knew how to be grateful for and utilize them, as they are appreciated and taken advantage of by the dwellers in Costa Rica."†

These facts are all sustained by many other writers who also have visited the country.

Carl Scherzer speaks with praise of the respect of Costa Ricans for property and persons.‡

The Central and South American Commissioners from the United States said:

"The name of Costa Rica stands high as a republic, alive to the demands of a progressive, freedom-loving people; her institutions and her wealth, her industries and improvements, bespeak a nation whose face is to the future, and whose enterprise will carry her to the high position her natural endowments and resources and advanced ideas demand."§

"Costa Rica, while the least populous, is the most advanced of the five Central American Republics. Its capital is lighted by electricity, and it has cheap telegraphs. It has the best educational and postal systems, and is displaying the greatest enterprise in the completion of public works and in the development of its resources. It has 181½ miles of railway in operation, and will be the first State to connect the oceans. A railway from the Jimenez to the Frio, on the border of Nicaragua, has been contracted for, and this will be brought

* Belly, *ibid*, above cited.

† Bolet Peraza, *ibid*, above cited.

‡ Dr. Carl Scherzer, on Central America, London, 1857.

§ Ex. Doc., No. 50, H. Rep., 49th Cong., 1st sess., p. 129.

into connection with the main lateral line. The completion of the Nicaragua canal will open a large section of the northern belt by rendering the San Carlos navigable through the slack-water of the Ochoa dam. There is a foreign debt amounting to \$11,000,000, but it is diminishing rather than increasing. There is no other Central American country that offers equally advantageous terms for European immigrants, but they do not come. Its railway projects have been dragging from lack of labor, and the extension of its unrivalled resources as a coffee-growing State is retarded from the same cause. It has, however, an industrious and orderly population, is improving its position year by year, and is to be considered the most promising community in this quarter of Spanish-America.' '*

H. Palakowsky,† William E. Curtis,‡ Frank Vincent,§ Paul Biolley,|| John Schroeder,¶ and others commend the honesty, laboriousness and good conditions of the people.

It is besides a remarkable fact, well authenticated and sustained in every way, that Costa Rica has not to-day, nor ever had at any time, claims presented to her for damages or injuries caused by arbitrary acts or measures on the part of her judicial or military authorities against the citizens of other nations; far from it, she opens her gates to them and freely gives them full liberty to enjoy and secure for themselves the inexhaustible treasures of her soil.

Numerous have been the efforts of the Republic to promote a greater development of the resources of the country, and, among other means to that effect, it has endeavored to attract a direct immigration by a system of colonization. The Government is conscious of the immense advantage which the country would derive from the increase of its population through immigration, and, without resorting to any artificial means, has shown itself exceedingly liberal in its concessions in favor of immigrants; but it is almost impossible to combat the difficulties there are in securing such improvement for a small country placed in the neighborhood of the United States of America, which offers attractions of every kind for immigrants from every part of the world.

* I. N. F., "The New York Tribune," June 21, 1891.

† Above mentioned.

‡ "The Smallest of American Republics," Harper's New Monthly Magazine, No. 449, Oct., 1886.

§ "In and Out of Central America," New York, 1890.

|| "Costa Rica and Her Future," Washington, D. C., 1889.

¶ "Costa Rica Immigration Pamphlet," San José, Costa Rica, 1894.

Costa Rica has always been distinguished by her strenuous efforts in the pursuits toward modern progress, and by the unity of race and love of peace and labor, which are characteristic traits of her patriotic children.

It would seem that the deficiency in the quantity of labor has been made up by the exceptional energy of her inhabitants, thus explaining why, with a population amounting to 262,661 souls, Costa Rica was able last year to place on the foreign market \$10,000,000 of her own products, and imported during the same period \$8,000,000 worth of merchandise, showing a commercial exchange of \$18,000,000, gold.

There are few countries which present such an example, and Costa Rica can proudly claim to be ranked, relatively, among the most productive nations.

Moreover the Republic has satisfactorily regulated and promptly paid its foreign debt, contracted for internal improvements; its railroad enterprises are being pushed forward to their completion, various important steamship lines arrive regularly at its ports, and it contemplates, in the near future, the construction of a canal, either across the Isthmus of Panama, or across its own territory and that of Nicaragua.

From the preceding it is obvious that Costa Rica well deserves the serious attention both of capitalists and men of business of every class, who will find there, combined with all the delights of a perennial spring, which promotes and preserves health, safe and profitable investments guaranteeing large returns.

J. B. CALVO.

WASHINGTON, D. C., *April, 1894.*



THE REPUBLIC OF COSTA RICA.

SOME FACTS AND FIGURES

COMPILED AND ARRANGED BY J. B. CALVO.

SECOND EDITION—1893.

Central America comprises five Republics, Guatemala, Salvador, Honduras, Nicaragua, and Costa Rica, which, together with the State of Chiapas and Soconusco, to-day a part of the Mexican Republic, formed the ancient kingdom of Guatemala under the Spanish Colonial Government, which territory, after the Proclamation of Independence, the 15th of September, 1821, constituted the Federal Republic of Central America, dissolved in the year 1840.

SITUATION.

The Republic of Costa Rica is situated in the southeastern extremity of Central America, between 8° and $11^{\circ} 16'$ north latitude and $81^{\circ} 35'$ and $85^{\circ} 40'$ west longitude from Greenwich—that is to say, between the tropics and the two grand divisions of North and South America, the Atlantic and Pacific oceans, and Nicaragua and Panama, where, possibly, two canals may separate the continent.

EXTENT OF TERRITORY.

The territory of Costa Rica embraces an area calculated at 59,570 square kilometers,* equivalent to 23,000 square miles, a little less than the area of West Virginia, and about double that of Switzerland.

* Anuario Estadístico, de Costa Rica, 1885.

MOUNTAINS.

A chain of high mountains crosses the territory from northwest to southeast, and thence branch out the mountains which cross the country in every direction, forming high plateaux, immense valleys, and extensive coasts, dividing the land naturally into three regions and presenting such a diversity of zones that nearly all known growths are possible in Costa Rica.

The principal elevations rise nearly to 12,000 feet. From the peak of Irazú one can see, besides the most magnificent panorama of the country, the two oceans—the Atlantic and the Pacific. The ascent from Cartago City to this mountain is a journey that anyone may easily make on horseback in six hours. The thermometer at that altitude sometimes falls to 30° Fahr., and even lower.

RIVERS.

The entire territory is crossed by rivers and rivulets, which fertilize every part and supply an abundant water power.

NAVIGABLE RIVERS.—The Rio Frio, which empties into Lake Nicaragua just where the San Juan River begins; the San Carlos and Sarapiquí, the future channels of commerce of Alajuela and Heredia, are tributaries of the San Juan River; the Sixola and Changuinola empty into the Atlantic Ocean; the Cricamola, into the Chiriquí Lagoon; the Tempisque into the Gulf of Nicoya, and the Rio Grande de Térraba into the Pacific Ocean.

CLIMATE.

The Republic is divided into three different zones or regions, designated by the names of *tierras calientes* (hot lands), *tierras templadas* (temperate lands), and *tierras frias* (cold lands).

The hot lands are those which form the low region, and extend from the seashore to a line in the interior of the country on the skirts of the mountains, 3,000 feet above the level of the sea. There the mean annual temperature varies from 72° to 82° Fahr., and it must be noted that the heat on the Pacific side is greater than that on the Atlantic.

The temperate lands, which form the second region, extend from the above mentioned 3,000 feet above the sea to a line toward the top of the mountains, at an altitude of 7,500 feet.

CREST OF VOLCANO IRAZU.



The third section, or cold lands, extends from the altitude above mentioned, 7,500 above the level of the sea, to the summit of the mountains. The difference between the temperature of day and night is felt here most keenly. The ground appears sometimes covered with white frost in the morning, but snow is extremely rare.

The temperate lands are described as follows by the United States commissioners to Central and South America, 1885 :

The valley and lower slopes of the mountains of Costa Rica, constituting its *tierra templada*, are the populous portions of the State. They possess a climate of wonderful salubrity, are well watered and very fertile. There is grown the great staple of export of the country—coffee. The country surrounding San José, the present capital, and Cartago, the old Spanish seat of Government, is very largely devoted to this branch of farming. * * *

The valleys are not plains, but uneven, broken through with numerous swift-flowing streams, and the inclosing mountains are not abrupt, and their declivities are generally tilled to their summit.

It would be difficult to imagine a more lovely landscape, a more beautiful blending of streams, fields, villages, white and glowing among the green foliage of coffee plantations, and mountain slopes dotted with the vivid green of sugar cane, and the gray and brown pastures of fields of corn, than can be seen in the valley of San José.*

The mean annual temperature in these lands varies from 57° to 68° Fahrenheit. The foreigner after residing sometime in the temperate lands can safely inhabit any part of the low region.

SEASONS.

They are well defined, there being but two seasons, the dry and the rainy. It usually rains from May to November in the central regions on the Pacific side, but on the Atlantic side, as a rule, the reverse is the order.

TERRITORIAL DIVISION.

The Republic is divided into five provinces and two comarcas (territories). The provinces are : San José Alajuela, Cartago, Heredia, Guanacaste, and the two Comarcas Puntarenas and Limón: Both the former and the latter are divided into cantons, and the cantons subdivided into districts.

POPULATION.

According to the historian Juarroz, the population of Costa Rica in 1778 was 24,536, and from the following censuses it was: In 1826,

* E. loc. above cited.

61,846; in 1835, 74,565; in 1884, 79,982; in 1864, 120,499; in 1883, 182,073; in 1888, 204,291; in 1892, 243,205.

Provinces.	Inhabitants.
San José	76,718
Alajuela	57,203
Cartago	37,973
Heredia	31,611
Guanacaste.....	20,049
Puntarenas.....	12,167
Limón	7,484
	*243,205

Considering the numerous omissions which it is impossible to avoid in the formation of a census, the number of inhabitants not counted is generally calculated to be 6 and even 10 per cent. The statistical office, taking an average of 8 per cent, estimates that the population of Costa Rica was 262,661 inhabitants in 1892. †

In Costa Rica, while there still exist aborigines, they number few, and are completely distinct from the civilized race. The latter is white, homogeneous, healthy, and robust. Industry, morality, desire for culture and advancement, a spirit of order, respect shown to the authorities, and love of work are their salient qualities.

FOREIGNERS.

Costa Rica opens her gates to foreigners and freely gives them the full liberty to enjoy and secure for themselves the inexhaustible treasures of her soil; yet, owing to lack of knowledge of the country, the number of foreigners amounts scarcely to 10,000—from Germany, the United States, France, England, Italy, Switzerland, etc.

PRODUCTIONS.

Few countries of the globe are so richly endowed by nature as Costa Rica. Indeed, the vegetation is as exuberant upon the highest mountains as upon the coast; her metals are among the richest and most precious; in her animal kingdom are included many

* Censo General de Costa Rica, February, 1892.

† Ibid.



COFFEE BERRY.

species of remarkable wild beasts; also of most beautiful birds and articles like the pearl oyster, which constitute a source of national wealth, and *Aplisia depilans* (a small snail that gives a violet color), considered to be the *Lepus marinus*, from which the ancients extracted the famous purple of Tyre.

AGRICULTURAL PRODUCTS.

Apart from the agricultural products raised for local consumption, those destined to the foreign trade are, among others, the following:

COFFEE, the principal product of commerce, was first planted in Costa Rica in the year 1796.*

The first grains were planted at Cartago, where the original trees, from which all the coffee trees of that country, and even of Central America, have been derived, can yet be seen in a flourishing condition.

The prices paid for Costa Rica coffee, especially in England, have caused almost all other branches of agriculture to be abandoned, and at present nearly 40,000,000 pounds of this product are exported yearly.

Statistics collected in 1892 show that at that time there were 8,232 coffee plantations with 26,680,907 coffee trees, and that in the same year 36,367,300 pounds of the product were exported.†

The number of plantations is always increasing, owing to the demand for the Costa Rican coffee in the foreign markets. Evidences of its excellence were given at Jackson Park, where thousands of visitors came every day to the Costa Rican Pavilion at the World's Columbian Exposition, attracted by the widely spread fame of the delicious beverage there served; and, as a consequence, fifty-five exhibitors of this product out of seventy-five were awarded medals in Chicago—a proportion not reached by any other country there represented.

BANANAS. The first cargo of bananas from Costa Rica to the United States was sent in 1880. This cargo consisted of only 360 bunches. Last year 1,133,717 bunches were exported, with a value of \$680,223.‡

SUGAR. The sugar cane grows luxuriantly in several localities of the Republic. There are 16,465 acres cultivated, the annual product of which amounts to 17,800,000 pounds of fine and ordinary sugar.

* Documentos inéditos de los Archivos Nacionales.

† Anuario Estadístico de Costa Rica, 1893.

‡ Ibid.

ALCOHOL. Rum, cordials, and liquors, bitters, etc., from the National Liquor Factory, have obtained high awards in various expositions. With fine buildings and complete machinery this factory furnished last year to the Government, the liquor being monopolized, a product of \$1,644,045.60.* The capacity of the factory would be sufficient to supply all Central America, but liquors are not exported, and the production therefore is limited to local consumption.

COCOA is cultivated on both the Atlantic and Pacific coasts, and in the valley of San Carlos. It is of excellent quality. In 1737, when Costa Rica had only a population of 24,000 inhabitants, there were 273,138 cocoa trees at Matina.† This cultivation decreased in proportion to the increase of the attention paid to the coffee industry.

TOBACCO. In Costa Rica tobacco is generally strong and very aromatic. It was formerly cultivated extensively, and constituted an important branch of commerce. The amount exported in 1771, was 302,161 pounds.‡ Subsequently the cultivation declined, owing chiefly to the more remunerative character of the cultivation of coffee. The tobacco industry in Costa Rica is monopolized by the Government, as is the case in Spain and some other countries, and the crop produced throughout the country must be disposed of to the agents of the Government. However, anyone may engage in the manufacture of cigars and cigarettes, and even in the cultivation of the tobacco in certain localities, on condition that the crop be either sold to the Government or exported.

This industry furnishes to the Government an annual revenue of \$600,000, if not more.

WOODS. Mahogany, cedar, rosewood, *lignum vitæ*, granadillo, and many other precious woods suitable for cabinetmaking and building purposes, are abundant in the Costa Rican forests; but up to the present time, little attention has been given, and only in the localities near the sea, to this great element of prosperity.§ The India rubber, the sarsaparilla, the *myroxylum* plant, which yields the balsam of Peru and Tolú, and many other medicinal, resinous, coloring and dye-

* Memoria de Hacienda, 1892.

† Viaje del gobernador Carrandi Menan al Valle de Matina, 1737, Costa Rica, Imprenta Nacional 1888.

‡ Documentos inéditos de los Archivos Nacionales.

§ See United States Consular Reports, vol. xvi, No. 53, p. 122.

ing plants, are also abundant, as was fully demonstrated at the World's Columbian Exposition.

Coloring, dyeing and ornamental woods are exported. The amount of this trade in the year 1892, was \$205,507.*

LIVE STOCK INDUSTRY.

Although there has been a great improvement of late in the breeds of cattle and horses, yet that high grade which could be easily attained in a country possessing so many natural advantages has not yet been reached. Costa Rica, with immense pasture lands so splendidly adapted for cattle that they might be raised for exportation, is obliged to import fresh meat for daily consumption.

The principal breeds being introduced to improve the native cattle are Durham, Jersey, Dutch, and Swiss cattle, of the Schuytz breed. The breeding of horses is progressing slowly, and sheep are very scarce, and not thoroughbred. The statistical report for 1892† gives the total number of these animals as follows: Horned cattle, 345,665; horses, 77,043; sheep, 2,775, with a value of \$5,827,609.

THE PRODUCTION OF THE MINES.

In regard to the mineral wealth, it is stated that the production of gold from the mines of Monte del Aguacate (Aguacate Mountains) up to date was \$7,000,000.

The scarcity of laborers and the absence of capital, as well as the want of intelligent management, were formerly the greatest barriers to the progress of this industry; but there is now a more favorable and different state of things brought about by means of new and powerful machinery, which permits of a more thorough exploitation of the metal, under the able direction of several foreign companies.

Besides gold, are: Iron in abundance, silver, copper, argentiferos lead, quicksilver, etc. Almost everywhere through the country mineral and thermal waters are found.

There are no charges or contributions upon the mining enterprises, nor duties imposed upon the exportation of the products of the same; they are, on the contrary, allowed to import, free of duty, all machinery, apparatus, and implements employed in the extraction of

* Anuario Estadístico, above cited.

† Above cited.

the metals,* and public lands are given upon which to erect the buildings: also the free use of water, etc., necessary for the exploitation of the mines.†

MANUFACTORIES.

The National Liquor Distillery, already mentioned, is the most important industrial establishment in the Republic.

The San José Foundry and the National Workshops are valuable institutions, and have contributed vastly to the progress of mechanical arts. All kinds of foundry, iron, and cabinet work can be performed: machines and farming tools and other implements are made.

The flour mill in San José is an excellent European mill, which produces good results, but not sufficient in quantity for the needs of the country.

The five breweries produce a good article of beer, which is vastly consumed; nevertheless, beer is also imported, to the amount of more than \$100,000 a year.

Artificial ice is manufactured and used a great deal, and the price, delivered to order, is \$2 for 100 pounds.

The silk and cotton factories produce fine articles, like shawls, scarfs, wraps, manufactured in the favorite colors of the people of the country.

WORKSHOPS.

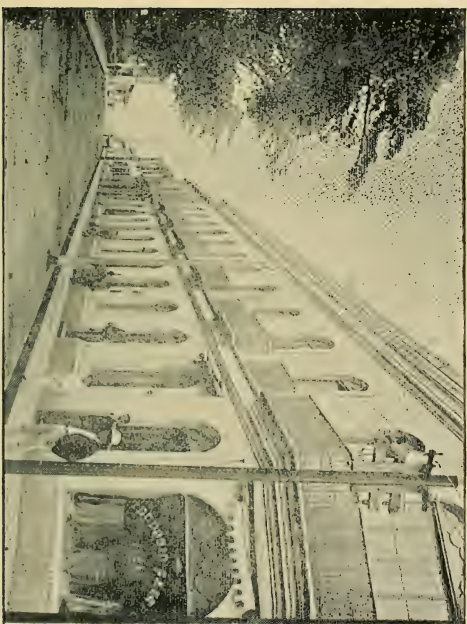
Tailoring, shoemaking, carpentering, beltmaking, cabinetmaking, etc., are very advanced. Masons and stonecutters are, as a rule, skillful at their work. The silversmith's trade and the jeweler's and watch repairing have reached great perfection. Engravers are not numerous, but there are some whose work is very fine.

Industries are divided as follows:

Armories.....	7
Bakeries.....	44
Barber shops.....	54
Beltmaking shops.....	29
Bookbinding shops.....	4
Breweries.....	5
Brick and tile factories.....	110
Carpentering and cabinetmaking shops.....	155

* Arancel de Aduanas, 1889.

† Colección de Leyes, 1887.



A STREET, SAN JOSE.

Cartridge (Remington's system) factory.....	1
Confectioneries.....	7
Cotton and silk factories.....	2
Curing coffee machineries.....	259
Dressmaking shops.....	5
Drug stores.....	58
Dyeing establishments.....	14
Flour mill, European system.....	1
Foundries.....	3
Ice factories.....	4
Limekilns.....	35
Liquor factory.....	1
Mining machinery.....	3
Photographers and art galleries.....	3
Printing offices.....	10
Saw and planing mills.....	75
Sculpturing shops (one for marble).....	4
Shoemaking shops.....	105
Silversmith shops.....	22
Other smith shops.....	70
Soap and candle factories.....	12
Starch mills.....	3
Sugar cane mills.....	671
Sugar refineries.....	6
Tanneries.....	39
Tailoring shops.....	90
Watch-repairing shops.....	*14

It may be noted that, notwithstanding the obvious activity, there is not enough production to supply the consumption of any article produced. The scarcity of labor demands that thousands of hands be brought into the country who would find lucrative employment.

The salary of a good workman, from the day laborer to the skillful artisan or mechanic, varies from \$1 to \$5 per day of ten working hours, wages which, in proportion to his expenses, enable him to save, as the cost of living is comparatively cheap.

COMMERCE.

The principal importations are silk, wool, linen, and cotton; machinery, implements, and tools for agriculture and various arts; furniture, glassware, tinware, hardware, and haberdashery; articles of ornament and luxury; silk, mercery, and perfumery; beer, wines, and

*Anuario Estadístico.

liquors of all kinds; soap, coffee sacks, flour, sugar, shoes, saddles, harnesses, etc.

All goods for Costa Rica should come accompanied by corresponding consular invoice.

The custom duties are calculated on gross weight, which, in general, amount to 20 to 25 per cent of the cost of imports, and are paid half down and half within three months' time.*

Commercial movement for past four years.

1888-89 Imports.....	\$5,201,922	
Exports.....	5,713,792	
		\$10,915,714
1889-90 Imports	\$6,306,408	
Exports	6,965,371	
		\$13,271,779
1890-91 Imports.....	\$6,615,410	
Exports.....	10,063,765	
		\$16,679,175
1891-92 Imports.....	\$8,351,029	
Exports.....	9,664,607	
		\$18,015,636

Statement of last year's commerce by nations.

Nations.	Imports.	Exports.	Total.
England	\$1,985,494	\$5,091,616	\$7,077,110
United States of America.....	2,419,243	3,983,941	6,403,184
Germany	1,697,490	422,789	2,120,279
France	868,035	50,953	918,988
Cuba and Spain.....	605,501		605,501
Other Central American States	238,076	89,619	327,695
Ecuador	194,975	966	195,941
Colombia	157,628	24,197	181,825
Jamaica	133,015		133,015
Other nations	51,572	526	52,098
	8,351,029	9,664,607	18,015,636

The principal ports of Costa Rica, are Limón on the Atlantic and Puntarenas on the Pacific. At Limón the vessels touch at the pier and the freight is loaded directly from cars to steamer, or *vice versa*.

* Tariff of Costa Rica in Bulletins No. 11, September, 1891, and No. 31, January, 1892, of the Bureau of American Republics, Washington, D. C.

† Anuario Estadístico, vol. vi, vii, viii, ix.

Hospitals and quarantine buildings are in both ports, Puntarenas and Limón.

As one illustration, the following statement is quoted from the very important work by Juan José Castro, entitled "Treatise on the South American Railways," published under the auspices of the Ministry of Promotion of the Oriental Republic of Uruguay, and sent to the World's Columbian Exposition at Chicago, 1893. It shows the value which each inhabitant contributes to the formation of foreign commerce in the shape of imports and exports from the following countries:

States.	Population 1891.	Imports.	Exports.	Commerce per inhabit- ant.
Uruguay	750,658	\$29,453,572	\$26,649,805	\$74 87
Costa Rica	262,400	8,351,029	9,664,607	68 66
Argentine Republic.....	4,326,155	119,602,856	98,685,256	50 45
Dominion of Canada	4,829,411	113,345,000	88,801,000	41 65
Chile.....	3,200,000	61,982,729	62,441,330	38 89
United States.....	64,500,000	844,916,000	872,270,000	26 52
Nicaragua	298,968	2,780,000	3,500,000	21 00
Brazil	14,568,120	119,745,160	143,021,000	18 50
Ecuador	1,132,000	10,861,553	8,822,160	15 15
Paraguay ...	350,000	2,962,666	2,574,333	15 82
Venezuela.....	2,323,527	14,722,882	20,183,467	14 90
Salvador.....	777,895	2,401,000	7,579,000	12 82
Mexico.....	11,885,607	44,000,000	75,467,715	10 05
Columbia	4,000,000	13,241,438	19,829,751	8 27
Peru	3,980,000	14,172,712	12,354,536	6 66
Bolivia	2,442,841	3,569,280	7,650,240	4 59

Taking the commercial power of Costa Rica, according to the foregoing statement, as \$68.66 per inhabitant, it is obvious that she needs only 1,500,000 inhabitants to reach a commercial status of more than \$100,000,000.

In other words, the commerce of Costa Rica would be as follows:

With a population equal in number to that of Salvador, \$53,410,270; with a population equal in number to that of Guatemala, *\$103,698,983, which countries exist under similar conditions, being, as Costa Rica is, a part of Central America. It is not necessary, then, to say

* Population of Guatemala, 1892, 1,510,326 inhabitants. Imports in the same year, \$7,806,730.90. Exports, \$14,175,392.55. Total, \$21,982,123.45.

one word further as to the industry of the Costa Rican people or the wealth of the Costa Rican soil. Figures speak for themselves.

BANKING HOUSES.

The Banco Anglo-Costaricense, established in 1863; capital paid up, \$1,500,000. The Banco de Costa Rica, formerly the Banco de la Unión, established in 1877; registered capital, \$2,0000,000; capital paid up, \$1,155,000. The first bank of Central America was established in Costa Rica by Don Crisanto Medina, in 1857.

MISCELLANEOUS SOCIETIES.

Other associations are the following: The Agency Company, which engages in all operations of loading and unloading vessels, capital \$200,000; San José Market, capital \$215,000; Cartago Market, capital \$100,000; Heredia Market, capital \$100,000; The Monte de Aguacate Mining Company, capital \$500,000; La Trinidad Mining Company, capital \$250,000; The Bella Vista Thermal Bath Company, of Cartago, capital \$100,000; The Costa Rica House Construction Company, capital \$250,000; The Electric Light Company, etc.

The Atlantic Railroad Company, the Costa Rica Northern Railroad Company, the Costa Rica Pacific Railroad Company, and the Costa Rica Pacific Gold Mining Company, Limited, are foreign companies incorporated in London.

MONEYS, WEIGHTS, AND MEASURES.

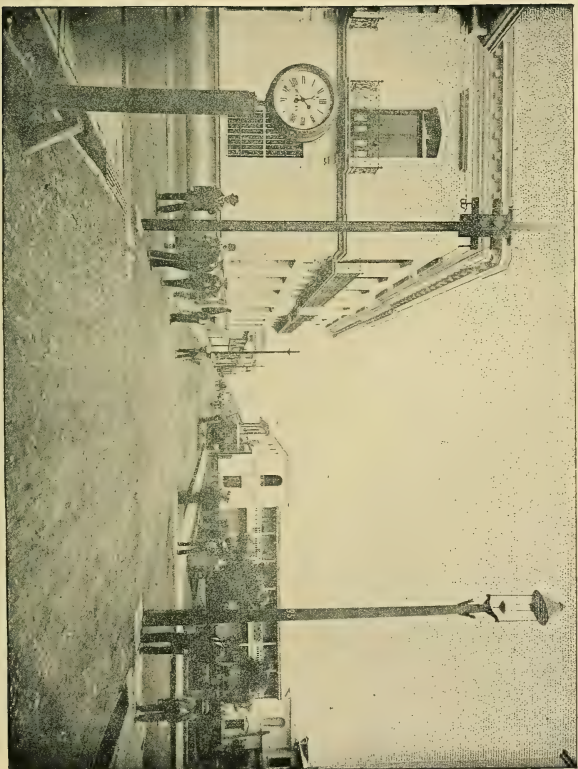
The moneys coined in Costa Rica up to date amounted to:

Gold.....	\$2,352,000
Silver.....	1,252,349
Silver from Colombia recoined.....	382,765
Copper.....	1,682
Total	*3,988,796

Their denominational value, arranged by the decimal system, is as follows: Gold, \$10, \$5, \$2, \$1; silver, 50-cent piece, 25 cents, 10 cents, 5 cents; copper, 1 cent. Besides, there is a great quantity of soles from Peru and pesos from Chile, circulating in the country.

The paper money of the country circulates in bills to the value of \$100, \$50, \$25, \$10, \$5, \$2, \$1. The bank notes are of the same values.

* Memoria de Hacienda, 1883, 1890, 1891; La Gaceta, Diario Oficial, No. 35, February 11, 1894.



BANCO DE LA UNION—UNION BANK, SAN JOSE.

The decimal system for moneys was adopted in 1863, and the French metric system was adopted for weights and measures in 1884.

WAYS OF COMMUNICATION.

The exceptional conditions of Costa Rica appear still more interesting when the situation she occupies is considered in relation to the points destined by nature for the uniting of the two great oceans. On the north the Nicaragua Canal will mark ere long her northern boundaries; on the south the Panama route. A simple glance at the map will show the facilities her territory affords for other interoceanic roads.

At present an important mixed road crosses the central and well-settled part of the Republic from the port of Limón, on the Atlantic side, to the Pacific port of Puntarenas, uniting the principal centers of population. The most important part of this road being

THE ATLANTIC RAILROAD,

With branches to Carrillo, Boca de Matina, Valverde, Swamp, etc. The trunk line of the Atlantic Railroad ends at present in Alajuela, touching at Cartago, San José, Heredia, and many other smaller towns. From Alajuela to Esparza a wagon road about thirty miles long across the "Monte del Aguacate," connects that line with

THE PACIFIC RAILROAD.

This railroad from Esparza to Puntarenas will be connected with that from Limón to Alajuela, and to that end a concession was granted to an English company, and thus the interoceanic railway will be completed.

THE NORTHERN RAILROAD.

Another railway to connect the Atlantic line with a point on the River San Juan and Nicaragua Lake is to be constructed and will permit the great improvement of an enormous amount of very fertile land, and will connect the country with the Costa Rica and Nicaragua Canal.

CANALS.

That which renders the situation of Costa Rica exceedingly favorable, and which will certainly one day permit her to consider herself as privileged among nations, says Paul Biolley,* is that she

* "Costa Rica and Her Future," cited.

occupies exactly the territory comprised between the two great interoceanic canals, which are most likely to be opened eventually, to the commerce of the world. Although the Republic does not touch directly on the Panama Canal, its commerce will naturally gain by the conclusion of this vast enterprise. A contract was entered into July, 1888, between the Government of Costa Rica and the Nicaragua Canal Company which sets forth the rights of the Republic to part of the waters and territory which the projected canal by the River San Juan and the Lake of Nicaragua would utilize, and makes clear the concessions which the Government would grant the company upon the execution of the work, this being declared of public benefit.

WAGON ROADS.

All the cities, towns or villages are connected by wagon roads, more or less well built and maintained. The communication with the Province of Guanacaste is also effected on the Gulf of Nicoya by little steamers, as well as that with the extreme south coast in both oceans, to Golfo, Dulce, on the Pacific, and Talamanca, on the Atlantic.

MAILS.

The domestic mail service is well organized. Correspondence for foreign countries is dispatched by the steamers touching at Limón and Puntarenas, as follows:

Atlantic Side—To Europe, via Hamburg, twice a month, 12th and 29th.

To Europe, by British Royal Mail, once a month, the 9th.

To Europe, via Marsella, once a month, the 12th.

To Europe and the United States, via New York, Fridays.

To Europe, the United States and Mexico, via New Orleans, Mondays.

Pacific Side—To West Indies and South America, via Puntarenas and Panamá, three times a month.

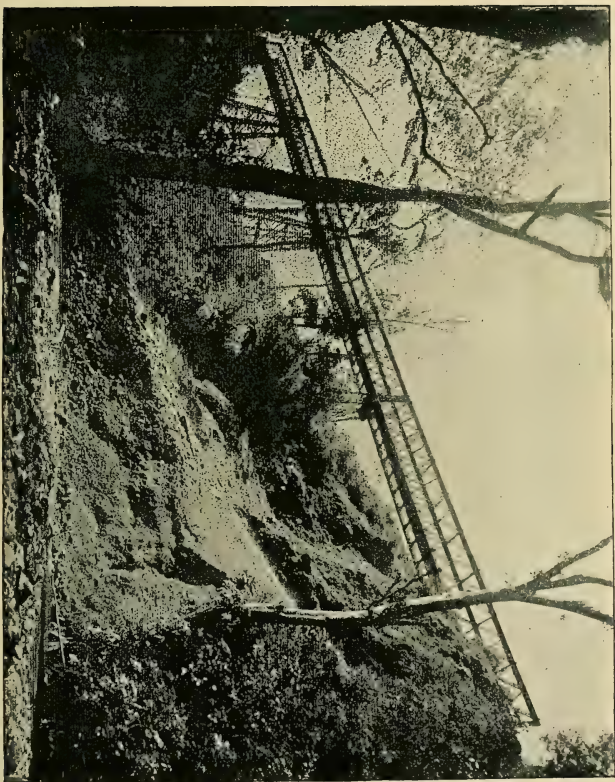
To other States of Central America, three times a month.

To Nicaragua, via Liberia, every Thursday.

TELEGRAPH.

Costa Rica was the first Central American State to have telegraph communication. It has been extended in every direction between all the cities, towns, and villages. Communication throughout Central America is charged at the same rate as within the country. The price for ten words is 20 cents, and for every five or less additional, 5 cents. The nearest office of the cable company—

RAILROAD BRIDGE AT BIRIRIS-617 SPAN, 300 FEET ELEVATION.



CABLE COMPANY

Is at San Juan del Sur, Nicaragua, not far from the frontier, and, of course, connected with the Costa Rican telegraphs. Concession was granted to one European company to connect Costa Rica with the cable on the Atlantic side by means of an office to be established at Limón, and besides, the Government opened negotiations for the establishment of a new office of the Central and South American Cable, at a point on the Pacific coast within Costa Rican territory.

TELEPHONE SERVICE

Was introduced in 1886, and is now operated not only within the limits of the cities, but between city and city, all over the country.

REAL ESTATE.

The property owners are so numerous and the Costa Ricans' habits of order so marked, it being an essentially agricultural country, that the necessity of a mortgage law was apparent for the purpose of maintaining and securing the rights of all.

The registry of property and mortgages was opened in 1867. The values recorded since, to the 31st of March, 1892, are as follows: Real estate registered, 70,638 farms; value, \$46,968,170. Mortgages registered amounting to \$9,675,303.*

Sales of properties or value of the transfer of real estate, mortgages, and cancellation of mortgages made during the year 1892, are as follows:

Provinces.	Value of transfers.	Mortgage.	Cancel-lation.
San José.....	\$1,885,162 57	\$1,371,877 00	\$756,454 57
Heredia	1,180,532 42	131,387 31	98,605 41
Alajuela.....	1,027,155 59	222,591 16	132,604 54
Cartago.....	731,156 66	384,053 24	286,565 27
Guanacaste	43,320 80	90,910 62	145,000 00
Limón.....	258,612 78	475,734 94	93,862 61
Puntarenas	65,541 50	12,462 84	41,214 00
Total	5,191,482 32	2,689,017 11	1,554,306 40 †

The *Ley Hipotecaria* of Costa Rica, which is considered perfect in its class, allows the mobilization, as may be said, of the real estate

* Memorias de Gobernacion, years 1884 to 1892.

† Ibid, 1892.

to all imaginable extent. The owner of a piece of land, duly registered in the office for such purposes established, can have the value of his property divided there into shares, and each share represented by a *cédula*, or bond, and arrangements are made so as to allow at any time, and with perfect safety for the bank or the money lender, funds to be raised on these "cédulas," and the latter to be used as collateral securities of the best character.*

GOVERNMENT LANDS.

The Government itself does not offer any special inducements to immigrants, but foreigners, as well as natives, can profit by very liberal laws in regard to the acquisition of lands, whether mineral, timber or agricultural.

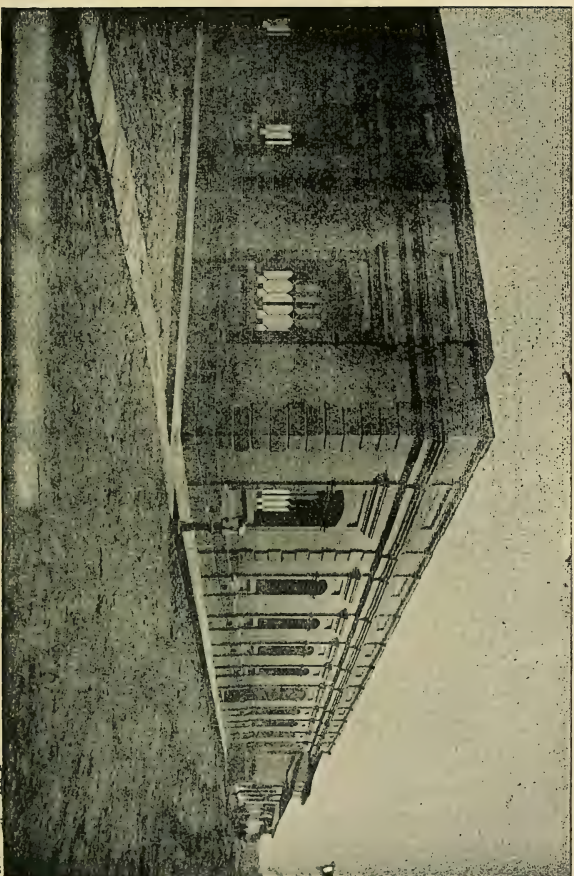
To acquire the public land when not under concession, there are two systems, one by pre-emption and the other by bidding at public sales.

By the first anybody can take possession of fifty hectares (123 acres) of Government land, and by fencing it and giving notice of the fact to the authorities of the district in which it is situated, and of his intention to cultivate it, no one can disturb him in his possession and enjoyment of the same for two years, during which he is obliged to cultivate his homestead. Should he fail to do so, the place can be taken by some other person, who would have to pay him the value of whatever improvements he may have made, but if he complies with the requirements of the law, he becomes the owner of the land. Whenever fifty hectares are thus fenced in and cultivated by the same person, he can go to work on fifty other hectares, and so on, subject to the same conditions.

By the bidding at public sales, a person can ask of the Land Office the sale at auction of any Government land to an extent not exceeding 500 hectares (1,235 acres) for each adult, the person asking for the sale has the privilege of purchasing the land for himself at the price brought at auction.

The lowest price that can be bid per hectare is \$5 for level pasture land; \$4 for timber or wooded land, from which natural products (rubber, vanilla, dye woods, etc.) can easily be obtained; \$3 for the

* Ley Hipotecaria, 1865. Código Civil, 1887.



SUPREME COURT OF JUSTICE.

same kind of land without the last mentioned of advantages; and \$2 for mostly uneven, marshy, stony or barren land.

Lands separated from a town of over 3,000 inhabitants, or from a railroad more than fifteen miles, are valued at one-half the price given; if distant more than thirty miles, at one-fourth, and if at sixty miles, at one-eighth.

The purchasers of public lands have the option of paying cash, or within ten years, at an interest of 6 per cent per annum upon the value of the purchase, with the interest payable at the end of every year.

Whenever the purchaser can establish by sufficient evidence that he has made improvements worth twice as much as the interest on the land purchased, he shall be exempted from the payment of said interest due; and if the improvements amount to double the price of the land, he shall be exempted from the payment of the price or principal. The purchaser has to pay all expenses to the Land Office and for the surveying of the land.*

Any person taking possession of public lands and thereupon applying himself to the cultivation of India rubber and cacao, will receive another portion of land equivalent to double the amount already cultivated. And those planting the same products on property of their own, will receive in public lands an amount trebling that already cultivated.

Premiums ranging from \$2,000 to \$5,500 are awarded, by a jury of qualification, to those who cultivate ten manzanas (about 21 acres)† at least, with India rubber, or five with cacao, considering in the first place the best method of culture employed.‡

One can buy from private owners sections already cleared from \$23.50 per acre upward. On the central plateau uncultivated land is worth at least \$90 to \$95, and that planted with coffee brings, in some places, as high as \$700 to \$1,000 per acre.

POLITICAL INSTITUTIONS.

Costa Rica is a Democratic Republic.

The Government is administered by three distinct powers, legislative, executive and judiciary.

* See the Código Fiscal, 1885.

† One manzana = 10,000 square varas; 1 acre = 4,840 square varas.

‡ Colección de Leyes, 1882.

The legislative power is exercised by one House, whose members are elected for four years. This body is called Constitutional Congress.

The executive power is vested in the President of the Republic, who is elected for four years, and is ineligible for a second consecutive term.

The judiciary power is vested in the Supreme Court of Justice, and tribunals under it established by law.*

ARMS AND COLORS.

The coat of arms is composed of three volcanoes joined and placed between two seas, with a ship on each side, on the left, a rising sun: on the top, five stars, and three flags on each side of the shield; and at the bottom a horn of plenty. On the upper part is a scroll, upon which is inscribed "América Central," and below "República de Costa Rica."

The flag consists of five horizontal bars, the outer ones blue, the next white, and the central red and of double width.

RIGHTS AND PRIVILEGES.

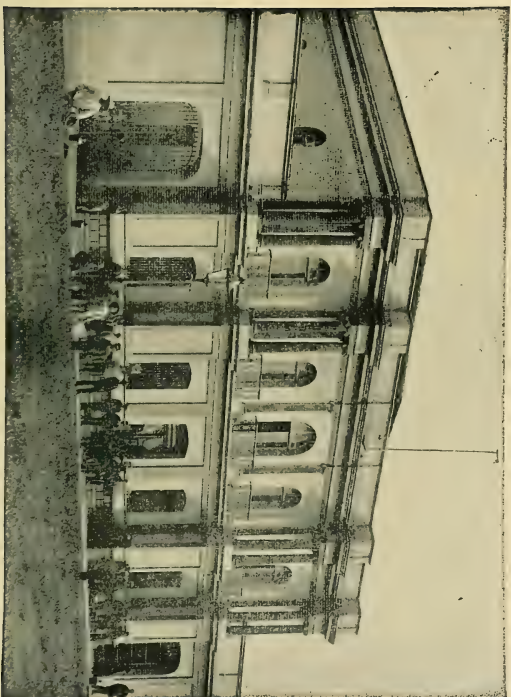
The rights of faiths, home and property are strictly observed, and have never been infringed upon in Costa Rica, nor have retroactive laws been framed.

The sacredness of correspondence, the right to meet in bodies and to petition, the right of *habeas corpus*, the liberty of the press—all are guaranteed by the Constitution.

Foreigners enjoy every civil right without being admitted to citizenship or being compelled to contribute heavy sums. Admission to citizenship may be applied for at any time and will be granted, as in most civilized countries, after one year's residence. Settlers are not obliged to become naturalized citizens nor to pay forced contributions. They can carry on business and manufacture, possess real estate, buy and sell, navigate the rivers and coasts, and, subject to the laws, may exercise freely their religious creeds, marry, and dispose of their property by will.†

* Constitución Política, 1871.

† Ibid.



EXECUTIVE MANSION.

PUBLIC ADMINISTRATION.

The Republic is divided, as already said, into five Provinces and two *Comarcas*, Territories. The Provinces are San José, Alajuela, Cartago, Heredia, Guanacaste, and the Territories are Puntarenas and Limón. Both the former and the latter are divided into cantons, and the cantons subdivided into districts.

The Territories are represented in Congress in the same way as the Provinces.

Each canton has a municipality popularly elected, and a political chief named by the President.

In each of the Provinces and Territories there is a Governor and a military comandant, also named by the President, and a judge of first instance appointed by the Supreme Court.

The City of San José is the Capital of the Republic.

NATIONAL REVENUES.

The present revenue is derived from custom house duties, revenue stamps and stamped paper, liquor and tobacco monopolies, sale of public lands, tax for registering property, and on slaughtering of live stock, etc. As it can be seen, there are no direct contributions.

The budget of the Republic has followed the progress of commerce, as shown by this table:

State of the National Treasury.

Years.	Receipts.	Outlay.
1824.	\$14,751	\$14,243
1840.	117,164	67,992
1880.	2,525,726	3,158,823
1889-'90.	4,975,865	4,938,540
1890-'91.	5,100,929	5,091,286
1891-'92.	5,808,474	5,449,290
		*

The municipal taxes are not high. The owners of real estate are obliged to pay only the taxes destined for the maintenance of the municipal police, street lighting, and the supply of water in the houses.

* Memoria de Hacienda, 1824-'92.

NATIONAL DEBT.

Foreign debt, converted at 5 per cent (£2,000,000), \$10,000,000 domestic debt, 1892, \$2,811,102.*

The Costa Rican consolidation paper rose in London, June, 1889, to 96¾, and for some time bonds of series A were quoted at 94 to 95, and those of series B at 92½ to 93½.†

The interest has been promptly paid ever since, as it was in previous years, but owing to the general depression of business that prevails throughout the world, and to the fall in the value of silver, the prices of the Costa Rican bonds are lower at present.

PUBLIC INSTRUCTION.

Elementary instruction of both sexes is obligatory, free, and provided for by the Government. Every Costa Rican, or foreigner, is free to give or receive instruction in institutions not maintained at public expense.‡

The amount appropriated for public instruction during the last five years was as follows:

1887-'88.....	\$186,700
1888-'89.....	281,000
1889-'90.....	315,380
1890-'91.....	555,380
1891-'92.....	§ 546,000

The number of primary, secondary and professional schools supported by the Government is over 300, with an attendance of about 20,000 pupils. In addition there are several private schools.

The primary and secondary schools are organized in Costa Rica on a system more or less similar to that of the United States. The number of pupils enrolled in these schools was 18 017, the same being 8 per cent of the population, and the attendance being an average of 74.60 per cent of the enrolled pupils.¶

The report of the United States Commissioner of Education for the year 1890-'91 ¶ contains a statement about schools below uni-

* Memoria de Hacienda, 1892.

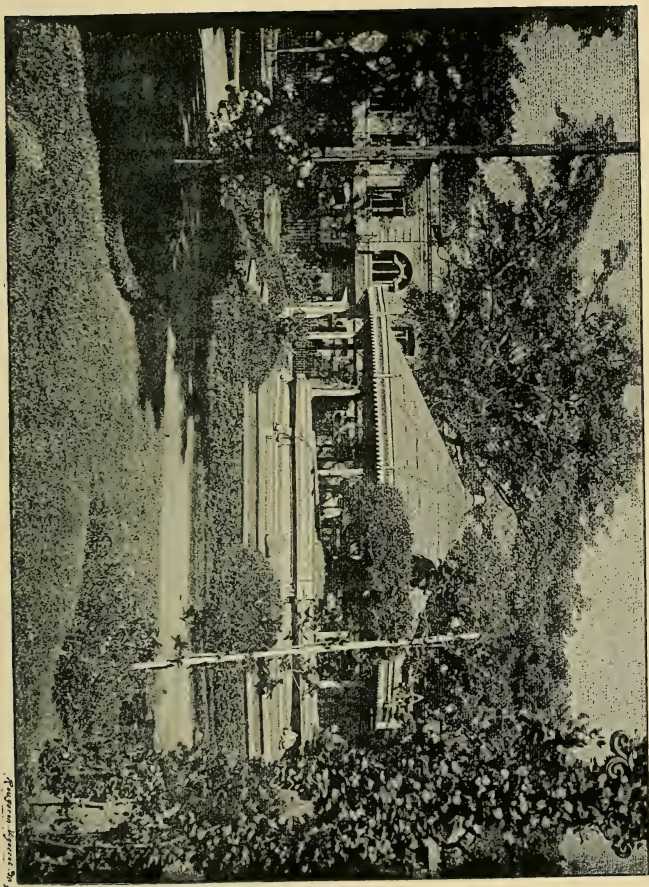
† Stock Exchange Prices, Straker Bros. & Co., London, E. C., 1889-1892.

‡ Const. Pol., above cited.

§ Memoria de Instrucción Pública, 1885-'92.

¶ Ibid.

¶ Washington, 1894, page 370.



AT CENTRAL PARK, SAN JOSE.

Frederick J. Brown, San J.

versities in the civilized world, from which the following data are quoted:

Countries.	Population.	Total number of youths in school.	Per cent.
Uruguay	676,955	70,240	10.4
Costa Rica	243,205	18,017	8.0
Argentine Republic	4,086,492	268,884	6.5
Ecuador	1,271,861	74,373	6.0
Nicaragua	282,845	14,901	5.3
Paraguay	392,645	15,709	4.7
Chile	2,817,552	126,370	4.5
Venezuela	2,323,520	106,718	4.5
Guatemala	1,460,017	56,057	4.0
Mexico	11,395,712	433,789	3.8
Salvador	777,895	28,536	3.6
Peru	2,621,844	75,522	3.0
Colombia	3,878,600	95,121	2.4
Brazil	14,002,355	290,990	2.0
Bolivia	2,300,000	26,400	1.1

Taking the ratio to population, according to the foregoing statement, as 8 per cent, it will show that with a population equal in number to that of Salvador, the children enrolled in schools in Costa Rica would be over 63,000; or with a population equal in number to that of Guatemala, nearly 117,000 children.

The Government pays for the tuition and expenses of a certain number of students educated abroad, as an encouragement for those who distinguish themselves in their studies and to provide for professors specially in those branches of science and art not developed in the country.

PRINCIPAL CITIES.

San José, capital of the Republic, lies at 9° 56' north latitude and 84° longitude west from Greenwich, at an altitude of 3,868 feet above sea level. Cartago, situated at the foot of the Volcano Irazú and at 4,930 feet, is one of the best located towns in Central America. Alajuela and Heredia, the former at an elevation of 3,001 feet, and the latter 3,786 feet, are situated at the base of the hills of Barba. The houses are of one, two and three stories high, and present a pleasing

appearance. They contain every modern convenience. The streets are paved with stone, except in San José, where the system of McAdam was adopted. The water works supply is modern. The houses are provided with iron pipes, and fountains are in the squares. San José and Cartago are supplied with electric light, and a concession was made to establish the same system in Alajuela and Heredia. The organization of the police has been given especial attention by the Government, is very satisfactory, particularly in the principal cities. Personal safety is, besides, absolute in any part of the country. One can, without the slightest danger, traverse alone and unarmed the most remote and isolated sections of the Republic. There are different charitable institutions, such as hospitals, orphan asylums for girls and boys, insane asylum, etc., all being under the management of corporations or unions constantly laboring to improve them. The cemeteries are also under the supervision of charitable associations. They are beautifully kept, and contain handsome tombs and vaults. Besides a museum there are several parks, public libraries, scientific societies of law and medicine, and also literary and musical associations. The hotel rates are from \$1 to \$3 per day, and offer the comforts of modern improvements. Artificial ice is much used.

HOW COSTA RICA MAY BE REACHED.

Costa Rica may be reached either by the Atlas line of steamers from New York to Limón, or by the Costa Rica and Honduras line of steamers from New Orleans to Limón, or by the Pacific Mail steamers from Seattle, Portland, and San Francisco, Cal., to Puntarenas. These are the direct routes. One can also reach Costa Rica from New York by the Pacific Mail steamers to Colon. At Colon the passenger can decide whether he will transfer to a Royal Mail steamer and enter the country at Limón or cross to Panamá, and there again embark in a steamer of the Pacific Mail and disembark at Puntarenas. Should the traveler come by Puntarenas, he will take the train to Esparza, and from that point to Alajuela, the distance of about thirty-six miles is made on horseback. At Alajuela he takes the train to San José. Should the traveler disembark in Limón, then he enters the train and makes the journey by rail to San José.

DISTANCES.

	Miles.
From New Orleans to Limón.....	1,340
From New York to Limón.....	2,025
From San Francisco, Cal., to Puntarenas	2,793

See for description and further information in regard to the country, "The Republic of Costa Rica," by Joaquín B. Calvo, published by Rand, McNally & Co., New York and Chicago, 1890; "Costa Rica and Her Future," by Paul Biolley, Washington, D. C., 1889; "Costa Rica," Bulletin No. 31 of the Bureau of the American Republics, Washington, D. C., January, 1892, and "Costa Rica Immigration Pamphlet," by John Schroeder, San José, Costa Rica, 1894.

For the Immigration Pamphlet apply to Mr. John Schroeder, Oficina de Estadística, San José, Costa Rica.

COSTA RICA AT THE WORLD'S FAIR.

[From the Monthly Bulletin, Bureau of American Republics, February, 1894.]

As appears from the official publications, the government of Costa Rica, as soon as the invitation to participate in the World's Columbian Exposition reached its hands, decided to give it the most careful attention, and issued orders for the gathering of choice samples of all natural, agricultural and industrial products of that rich country for exhibition in the great contest of the civilized world. There were two reasons that principally influenced the Costa Rican government in making that decision: First, its desire to bind more intimately the existing intercourse of friendship and commerce with the United States of America; and, secondly, the consideration that, as the great city of Chicago, situated in the center of this great country, is the emporium of trade, and the unrivalled railroad center of the world, it offered all kinds of facilities to that object, and was consequently a sure guarantee of success to the Exposition.

In order to carry the said decision to success, the Executive recommended the project to the National Congress, and that body appropriated, to meet the expenses of the Costa Rica exhibit, the sum of \$150,000, which, proportionately to the number of inhabitants of the Republic, is larger than the amount granted for the purpose by any other nation.

As soon as the appropriation was made, Señor Don José Joaquín Rodríguez, the president of the Republic, ordered an office to be opened in Costa Rica, wherein all the products and objects to be

exhibited in Chicago should be collected; and there, under the active and wise direction of Don Joaquín Lizano, and Don José Vargas, M., who were successively at the head of the Department of Promotion of Public Welfare, and the active co-operation of Don José Lino Matarrita, of Nicoya, Don Trinidad Vargas, of Golfo Dulce, and Don Teodoro Koshney, of San Carlos, the collecting of the exhibit was started. According to the catalogue, the most valuable exhibit of products was due to the efforts of the latter gentleman.

While this work was being carried on with an amount of interest never before shown in the country on similar occasions, the government sent instructions to Don Joaquín Bernardo Calvo, chargé d'affaires of Costa Rica, at Washington, for the selection of a site and the construction of a building as well as for the acquisition of all the fixtures required. He was also authorized to take all necessary steps with the officers of the Exposition for the success of the undertaking.

It was unfortunate that, during the course of these preparations, the danger of an invasion of cholera overshadowed the country and interrupted for awhile their progress. It was feared also that the Chicago Exposition itself could not be carried out on account of the quarantine, and because some cases of cholera had appeared in the city of New York.

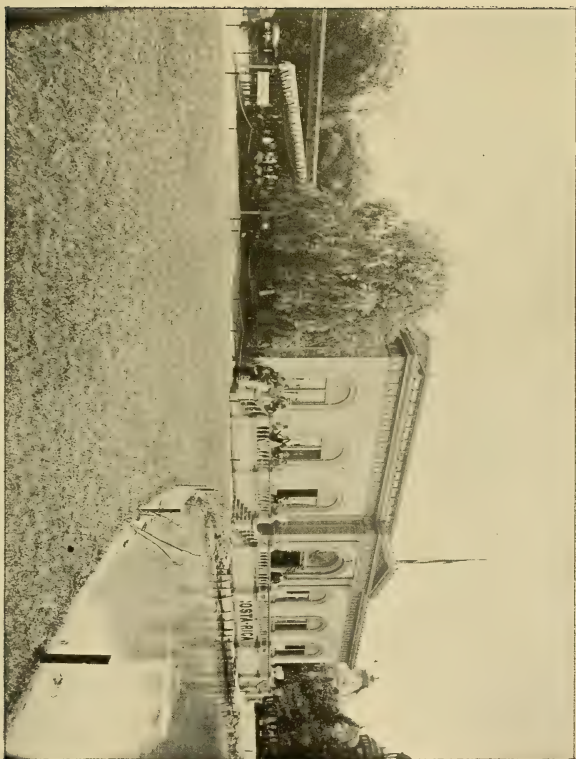
Costa Rica was then obliged to close her ports, and to abandon for the moment, almost completely, all projects referring to the Exposition. To this calamity, another of serious consequences was added, namely, the fall in the value of silver and the consequent rise of the rates of foreign exchange.

These great obstacles were not sufficient, however, to effect a radical change in the decision already made on the subject, and as soon as the fear of the cholera was over, the government resolved to follow the former plan, and ordered at once the continuation of the preparations. But the time then was rather limited, and it is therefore to be regretted that none of the collections of the products could be exhibited complete

THE COSTA RICA PAVILION.

For the reasons stated above, it was considered necessary to set aside the plans for the pavilion, as they had been drawn in Costa

THE COSTA RICA BUILDING, LOOKING WEST.



Rica and approved, and others, more economical, drawn by Architect James G. Hill, of Washington, D. C., following the indications of the engineer, Don Nicolás Chavarría, M., director of public works of Costa Rica, were adopted in their place.

The contract for the construction was entered into between the chargé d'affaires, Mr. Calvo, and Messrs. Cass, Chapman & Co., of Chicago; but these gentlemen, on account of a lack of time, were unable to finish their work before the 1st of May, the day on which the Exposition was inaugurated.

The Costa Rican building was situated at the east end of the North pond, facing west, and the location was one of the best within the grounds. Across the North pond, in beautiful perspective, and within a distance to be fully appreciated, were the Illinois, Washington, Indiana, Ohio and Wisconsin buildings. To the right, were the galleries of Fine Arts, and on the left, the buildings of Guatemala and Brazil, while as a background, and not far distant, Lake Michigan murmured its praises to the efforts of mortal man.

The building was Doric in style; 103 feet long by 60 feet wide, two stories and clerestory, making the full height 50 feet. On each side, there was a Doric portico 22 feet wide, supported by four large pilasters. On the west front, a spacious platform, with a handsome balustrade, adorned with beautiful stone urns brought from Costa Rica, led up to the main floor; and opposite this front entrance, broad double stairways led to the second, or gallery floor, supported by eighteen columns rising to the full height of the clerestory.

The cornices, frieze molding, caps and bases, window casements, etc., were made of iron. The main walls were cemented, and all was painted in soft colors. The inside walls were plastered, and the walls and timber work were frescoed in a modest and becoming manner.

The building was lighted by twenty large double casement windows in the first story, and ten large skylights in the roof of the clerestory, while on all sides of the latter, the windows were pivoted so that, when opened, they could afford perfect ventilation. Ample toilet rooms were provided on each floor. Over each main entrance to the building the national coat-of-arms of the Republic in bold

relief was placed and constituted a striking addition to the decorative part of the work. The building cost \$20,000.*

THE COSTA RICAN COMMISSION.

When the products to be exhibited were ready, and all the necessary preparations in Chicago had been completed, the Government issued the following decree:†

No. 112.]

SAN JOSÉ, March 29, 1893.

The President of the Republic has resolved to organize the Commission that is to represent Costa Rica in the approaching International Exposition of Chicago in the following form:

President, Señor Don Manuel M. Peralta, E. E. and M. P., from Costa Rica at Washington.

Secretary, Señor Don Joaquín Bernardo Calvo, Chargé d'Affaires of Costa Rica at Washington.

Vice-President and Commissioner-General for Agriculture and Industry, Señor Don David J. Guzmán.

Vice-Secretary and Commissioner for Archæology, Señor Don Anastasio Alfaro.

Signed by the President.

(Countersigned)

VARGAS, M.

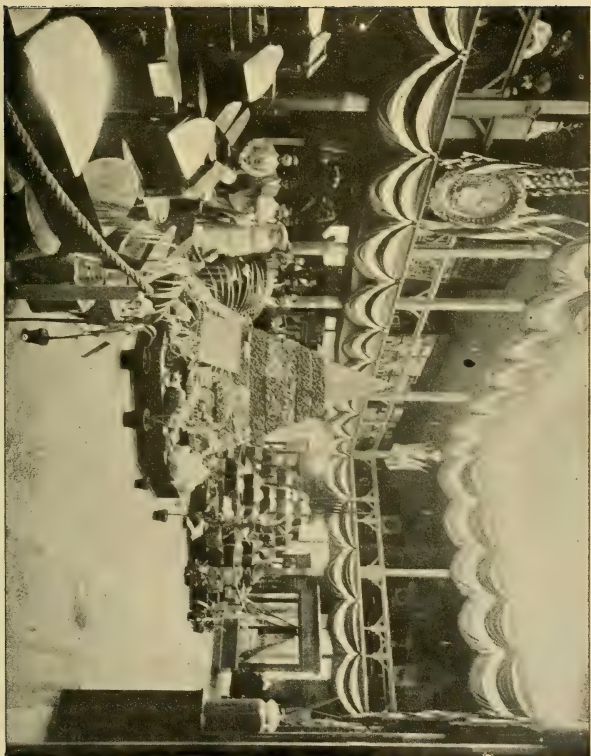
The Commission did not meet in Chicago until about the middle of May, and during that period, Messrs. Calvo and Alfaro were in charge of the work; co-operating with them, was Dr. Francisco J. Rucavado, who afterward was also appointed commissioner:

INSTALLATION.

As to the interior of the pavilion, the plan generally adopted in the arrangement of museums was followed: A large hall surrounded by a gallery accessible by two staircases, placed one on each side of the eastern entrance of the pavilion, as has been said; had some glass cases, containing natural and agricultural products, arranged in classified groups beneath the gallery on the main floor, in the center of which rose a high graceful pyramid, formed of minerals, having two others, composed of specimens of wood, placed on its sides.

* The foregoing description of the building appeared in the General Catalogue of the World's Columbian Exposition.

† La Gaceta, Diario Oficial, No. 74, March 30, 1893.



INTERIOR OF THE COSTA RICA BUILDING, LOOKING NORTH.

Each one of the corners of the main floor was occupied by glass cases containing samples of beautiful silk fabrics in the favorite colors of the people of Costa Rica, in the shape of scarfs, mantillas and wraps, all of which gave due credit to the industry of the country on account of their fine workmanship.

A precious collection of gold and silver jewels, and of gold and tortoise shell combined, very carefully worked throughout, alongside of a complete collection of the national coins, and two of foreign coins, a complete collection of bank notes, and of the national postage stamps, presented one of the attractions of the exhibition.

Fishing implements and tools used in the country were exhibited, and a collection of fish, preserved in alcohol, showed the varieties of this product, both in salt and fresh waters.

At the northern extremity of the same floor, the aromatic and delicious Costa Rican coffee was served. The space inside not being large enough to accommodate the always increasing number of persons drawn by the celebrity of this peerless product of Costa Rica, an addition was made on the outside of the building with a capacious awning covering.

At the southern extremity of the gallery was a drawing-room, decorated with elegant curtains. Here were the portraits of the President of the Republic, Señor Rodriguez; of the four Secretaries of the Executive, and a handsome view of the city of San José, the capital of Costa Rica.

At the other extremity, there was a panoramic view of the steep heights of the volcano of Irazu, the only place in the world from which the Atlantic and the Pacific Oceans can be seen simultaneously. On the principal sides of the gallery, and in glass cases arranged as those on the first floor, the magnificent school exhibits of which Costa Rica can be proud, were placed; sundry articles made by women—among these two needle-embroidered pictures on silk; pita hats (generally known as Panama hats), and different kinds of implements, such as brushes, harnesses, saddles and other like articles, as likewise sundry articles of wrought and cast iron, etc., and an extensive collection of photographic views of interesting places, buildings, coffee patios, machinery, railways, roads, villages and types of the natives, etc. At one side of the hall, were a considerable number of literary works, written by Costa Rican authors; maps, drawings,

reports, and other official publications, which give honor to their country. In this section of the exhibition, special mention is due to the National Museum of Costa Rica, for the very rich and extensive collection of stuffed animals, the ornithological part being very remarkable and attractive.

Coffee plants, palm trees and Costa Rica orchids and flowers were blended together with the national colors, forming the decoration and ornamentation of the large hall. If the appearance of the unpretentious but elegant building of Costa Rica caused a very pleasing impression when seen from the outside, the view of the interior produced a real surprise on account of the magnificent *tout ensemble* it presented to the spectator.

LIST OF THE EXHIBITS.

The exhibit of Costa Rica was characteristically a display of the products of the land. Classified according to the regulations issued by the Chicago Exposition, it was comprised in the following groups:

DEPARTMENT A.—AGRICULTURE.

GROUP NO. 1.—Wheat of various kinds, Indian corn of all varieties, barley, rice, wheat flour, yucca flour, corn meal, bran.

GROUP NO. 2.—Biscuits and crackers, vermicelli and maccaroni.

GROUP NO. 3.—Cane sugar, native honey of five varieties, exotic honey, confectionery.

GROUP NO. 4.—Potatoes, sweet potatoes, yams, radishes, turnips, beets, onions, peanuts, roots for starch.

GROUP NO. 5.—Beans of twenty-three different kinds.

GROUP NO. 6.—Prepared cocoanut.

GROUP NO. 7.—Cheese (never came).

GROUP NO. 8.—Coffee of various kinds and in its different grades of preparation, Liberia coffee, cacao, chocolate, pepper, cloves, anise and other spices, tobacco in the leaf.

GROUP NO. 9.—Cotton, ochreous color cotton, nineteen varieties of vegetable fibers, native silkworms, horse hair as a harness material.

GROUP NO. 10.—Twenty-two different kinds of mineral waters, ten different kinds of thermal waters.

GROUP NO. 11.—Wines, rums, cognac and other spirits; cordials and liquors, bitters, vinegar, chicha.



INTERIOR OF THE COSTA RICA BUILDING, LOOKING SOUTH.

GROUP NO. 12.—Beers, ales, porter, stout.

GROUP NO. 13.—Photographs of fences, farm buildings, farm-houses, patios for drying coffee.

GROUP NO. 15.—Statistics of coffee farms.

GROUP NO. 16.—Coffee machinery. (See Group No. 79.)

GROUP NO. 17.—A large collection of hides and skins of eighty-two species of wild animals, tortoise shells of various kinds, fossil tusks and molars of mastodons.

GROUP NO. 18.—Animal oils of eleven kinds, whale oil, fish oil, lizard oil, tortoise oil, etc., vegetable oils of seven kinds, linseed oil, fig oil, palm oil, etc; soap of various classes; stearine candles, two kinds.

FORESTRY—FOREST PRODUCTS.

GROUP NO. 19.—A collection of 463 samples of different kinds of wood and timber used in construction and manufactures; ornamental and fancy woods, mahogany, cedar, etc.

Twenty-nine classes of dyeing, tanning and coloring plants.

Barks of various kinds; vegetable substances used for bedding and upholstering.

Gums and resins of fifty different classes, vegetable wax, India rubber, copal, turpentine, balsam of Peru, etc.; seeds and fruits for ornamental purposes, vegetable ivory, cocoanut shells, ornamental gourds, medicinal roots, sarsaparilla, herbs, barks, mosses, berries.

Baskets made of fibers.

DEPARTMENT B.—VITICULTURE.

GROUP NO. 20—Maranon wine, Coyol wine, brandy, cordials, rum and cognac.

POMOLOGY.

GROUP NO. 21—Peaches, quinces, apricots, oranges, lemons, citrons, limes, pomegranates, bananas, pineapples, guavas, mangoes, papaws, tamarinds, figs, sapotillos, anonas, mammees, etc., by imitations made in wax. Almonds, cocoanuts. Vinegar made from bananas.

FLORICULTURE.

GROUP NO. 22—Seventy species of orchids, palms, ferns; herbarium of sixty-two classified species.

CULINARY VEGETABLES.

GROUP NO. 23—Thirty-seven species of beans, vetches, lentils, peas, peppers, tomatoes, cucumbers, squashes, melons, eggplant, etc; beets, turnips, potatoes, sweet potatoes, cassave, yucca.

ARBORICULTURE.

GROUP NO. 25—A collection of ninety ornamental trees and shrubs.

DEPARTMENT C.—ANIMALS.

GROUP NO. 34—Collection of 692 stuffed birds of Costa Rica.

GROUP NO. 35—Collection of 789 insects.

GROUP NO. 36—Collection of stuffed animals native to Costa Rica.

DEPARTMENT D.—FISH AND FISHERIES.

GROUP NO. 37—Collection of sponges and corals, conches and shells. Specimens of marine and fresh-water fish.

GROUP NO. 38—Fishing gear, fishhooks, nets and seines, harpoons, gaffs, etc.

GROUP NO. 40.—Fish oil of various kinds, polished shells.

DEPARTMENT E.—MINES AND MINING.

GROUP NO. 42.—Collection of seventy-four minerals, gold and silver bearing ores, gold, silver, iron, copper and lead ores; silver, iron and copper bearing ores; serpentine; iron and lead ores; mercury; lead and zinc ores, meteoric iron.

GROUP NO. 43.—Lignite, tuba, etc.

GROUP NO. 44.—Alabaster and marble; marble, black and white; granite and other stones; petrified wood.

GROUP NO. 46.—Basanite, obsidian, clay, etc., yellow marl; labradorite, feldspar, etc.

GROUP NO. 47.—Limestone, lime, carbonate of lime, carbonate of lime crystallized; gypsum.

GROUP NO. 48.—Salt, sulphate, etc., sulphate of lime, marl, gypsum, etc., sulphur and pyrites, chalk, fossil shells.

GROUP NO. 67.—Maps of the mines of Monte del Aguacate; plans of the mines of Monte del Aguacate.

DEPARTMENT F.—MACHINERY, ETC.

GROUP NO. 75.—Portraits and lithographic groups, maps, charts, etc.; collection of diplomas, etc.; specimens of printing.

GROUP NO. 79.—A machine for preparing coffee. (See group No. 16.)

DEPARTMENT G.—TRANSPORTATION.

GROUP NO. 83.—Harness, robes and accessories of the stable, whips, etc.; bridle reins and bits, spurs, saddles, saddlebags, trappings and accoutrements of horses.

GROUP NO. 85.—Ropes, cordage.

DEPARTMENT H.—MANUFACTURES.

GROUP NO. 87.—A collection of drugs and other preparations.

GROUP NO. 89.—Specimens of binding, bookbinding; penholders, paper cutters made of tortoise shell and gold.

GROUP NO. 91.—Shell work, polished shells; mosaics made of shells.

GROUP NO. 92.—A collection of twelve stone urns.

GROUP NO. 96.—Specimens of wood, carved; collection of utensils made of wood, carved; silver and wood shovel used in the inauguration of the Costa Rica Railway to the Atlantic.

GROUP NO. 98.—Jewelry, rings, bracelets, necklaces, charms, medallions, gold covered and gilt jewelry, napkin rings, nail cleaners, combs, paper knives.

GROUP NO. 100.—Silk shawls, scarfs, wraps.

GROUP NO. 101.—Mats and cigar cases made of rushes, Panamá hats.

GROUP NO. 104.—Cloaks, mantillas, ladies' and children's costumes, boots and shoes. (The latter never came.)

GROUP NO. 105.—Collection of furs and skins, some of them tanned.

GROUP NO. 106.—Embroidered portraits, embroidered handkerchiefs, napkins, etc. Various samples of needlework; artificial flowers, trimmings of various classes.

GROUP NO. 107.—Combs, brushes, etc.

GROUP NO. 108.—Cigar cases, canes of ornamental woods.

GROUP NO. 110.—Vases, boxes, chessmen, fancy articles made of aromatic and ornamental wood, billiard balls and cues.

GROUP NO. 111.—Tanned leathers. (Never came.)

GROUP NO. 118.—Wrought iron, artistic forgings.

DEPARTMENT L.—LIBERAL ARTS.

GROUP NO. 149.—General and complete school exhibition, hand-writing, drawing, etc., needlework, embroidery, etc. Collection of text-books used in primary and higher schools, plans and photographs of school buildings, annals, reports, statistics, etc.

GROUP NO. 150. Very extensive collection of national publications, natural sciences, literature, history, geography, statistics, magazines and newspapers; bindings, specimens of typography, illustrated papers, schoolbooks, government and other official publications, maps, etc.

GROUP NO. 151 —Very extensive collection of photographs.

GROUP NO 152.—Hydrographic survey of the Gulf of Nicoya and the harbor of Culebra; plan of the city of San José; plans of buildings.

GROUP NO. 153.—Reports of foreign relations; collections of postage stamps; civil and penal law of Costa Rica.

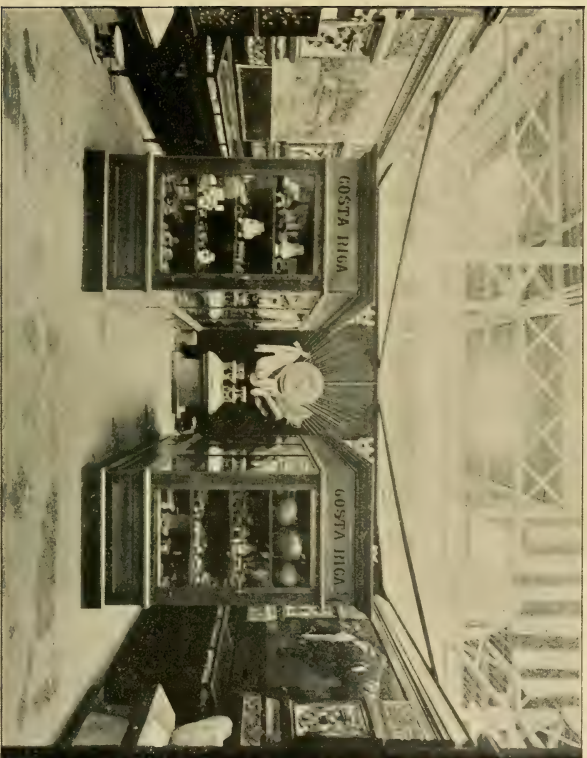
GROUP NO. 154 —Statistics of trade and commerce; government exhibit of coins, bank notes moneys, postage stamps, etc.

GROUP NO. 158.—Musical compositions, national airs, etc. (never came), guitars and bandores made of fine woods.

DEPARTMENT OF ETHNOLOGY.

The archæ. logical exhibit displayed by Costa Rica in a space of one thousand feet square in the Anthropological building was of high merit, scientifically, and of great actual value. It was noticeable at a glance that the three thousand exhibits composing it were all original and distinct, not a single reproduction being found among them.

Apart from the merits of its antiquity, an antiquity anterior to the discovery of America, it may be said that the Costa Rican archæology is the link connecting the ancient specimens found in the other states of Central America and the discoveries made in South America. In this respect the Costa Rican archæology presents well-defined traces of two distinct civilizations, one descending from the north by the Pacific coast, and the other immigrating from an entirely opposite direction, from south to north, following the



THE COSTA RICA SECTION AT THE ANTHROPOLOGICAL BUILDING, LOOKING NORTH.

temperate plains on the Atlantic side. The first is typified by the ancient people called Chorotega, and the latter by the Guetares.

With very rare exceptions, a continuous series of antiquities can be established along the Pacific, from the southern part of Costa Rica up to the northeastern portion of Nicaragua, Nicoya being here one of the principal centers of the Chorotegan civilization.

On the western side of the country, from Chiriquí up to the River of San Juan de Nicaragua, a similar distribution is noticeable, the only difference being that there the civilization of the Guetares seems to have spread out toward the interior of the country, following always the valleys alongside of the Reventazon River, up to the central plateau, where it comes in contact with the Chorotegas, near the Herradura volcano on the Pacific coast.

This is what these 3,000 archæological specimens exhibited by Costa Rica showed, according to Señor Alfaro, Commissioner of Archæology. All and each one of them are perfectly well identified, as absolutely all have been excavated from ancient tombs in certain localities, a work in which many private individuals at first, and lately the National Museum, and even the government directly, have spent thousands and thousands of dollars.

The typical tombs wherein these specimens of antiquity were found, are illustrated by large oil paintings, reproductions of the original photographs taken at the time the excavations were made in several Indian burial grounds.

There was, among other paintings decorating this section, one of great historical value, representing the villa of the Cacique of Suerre in 1544, executed from the drawings of Jerome Benzoni, an Italian soldier, who, in the same year, followed Diego Gutierrez, in the expedition he undertook to conquer and pacify the Indians.

In the decoration of this Costa Rican section, one of the most important of the Anthropological Building, a refined taste was noticeable throughout, combined with careful order. Everything presented the seal of its indigenous antiquity. The doors, the frames of the pictures, and even the folders of the Columbian maps, show the handicraft of the old American Indian, all forming an indigenous architecture, extremely interesting and instructive.

Coming now into the details of the component parts of this magnificent archæological exhibition, it may be considered as divided

into three large groups. The first is that of idols and gold jewels, 150 in number, among which there are many that show a stage of great improvement in the goldsmith's art, such, for instance, as the hammered patens, many of which are composed of three superimposed sheets, so made, undoubtedly, for the purpose of giving them greater solidity. Other figures present samples of perfect smelting work, such as the devilkins and the small bells. Vestiges of the mold and traces of the hammer can be noticed. There are also many pieces of copper, and in these, the outside gilding is one of the curious problems that archæology has been as yet unable to solve.

The second group is composed of objects made from volcanic stones or rocks, among which there are some table-like, in the shape of perforated fruit dishes, representing the work of many months, and perhaps of whole years. Besides these exhibits and *metates*, the grinding-stone for corn, there are knives and maces of porphyry, of practical use to the aborigines; human and animal figures, some above the natural size, sculptured, if this term can be used, by the Indians, all forming an integral part of the exhibition. The ornaments of jade, a green stone highly appreciated among the natives of America as well as among Eastern Asiatics, and the origin of which, during many years, has been attributed to the latter, are also worthy of special notice.

The third and most numerous group is composed of earthenware utensils, presenting an immense variety in forms and sizes, some of such remarkable artistic taste as to have deserved the praises of the historians and chroniclers of the period of the Conquest. Among others, the eminent historian Oviedo, referring to the Indians inhabiting the islands of the Gulf of Nicoya, wrote as follows:

In the island of Chira, plates and dishes, and also jugs, jars and other kinds of vessels are manufactured; all are very elaborate, and as fine as the best black velvet, and as sparkling as a very well-polished jet. And I brought along with me some pieces of said crockery to this city of Santo Domingo, of the Hispaniola Island, which, so far as their beauty is concerned, might be presented to a prince. And of the size and shape that the Indians are ordered to make them, so they do make them.

As to its pecuniary value, the archæological exhibit of Costa Rica has been appraised at \$50,000. But these precious relics of the primitive inhabitants of the country would never be sold for any

amount of money, as they constitute a treasure, highly valuable, each object representing, as it does, a part of the unwritten history of important races that are no more.

The collections, arranged by the same commissioner of archæology, Señor Don Anastasio Alfaro, director of the National Museum of Costa Rica, to whom we are indebted for this information, were exhibited last year, 1892, in Madrid, Spain, and they there obtained as awards six first-class medals. Señor Alfaro was also presented with honorable decorations.

EXPENSES, EXHIBITORS, JUDGES, AWARDS.

The expenditures of the exhibition in the Costa Rican Pavilion, including the cost of the building, service and transportation, exceeded	\$100,000
And the installation of the section of archæology, at the Anthropological Building, service and transportation included, cost.....	10,000
Total amount	\$110,000

All the expenses were defrayed by the Government, both on account of the character of the exhibition, consisting, as we have seen, mainly of natural products, and the desire to encourage the greatest possible number of individual exhibitors. The circumstances already referred to, namely the impending danger of cholera, and the consequent uncertainty as to the possibility of holding the Exposition at all, made the total number of exhibitors much smaller than it would otherwise have been.

According to the official catalogue of the World's Columbian Exposition, the number of the Costa Rican exhibitors was 363. Apart from the Government, however, the number of individual exhibitors was, in fact, only 141, some of the exhibitors being represented in several different groups.

Of all the departments already mentioned, it is only in those of agriculture and ethnology that Costa Rica had judges of awards. They were, respectively, Señor Don Joaquín B. Calvo and Señor Don Manuel M. Peralta, who were indicated for the positions by the government of their country. Mr. Calvo was assigned to group No. 8, the most laborious of the Department of Agriculture. The Department of Ethnology was not divided into groups.

The following are the awards obtained by the exhibitors from Costa Rica:

DEPARTMENT OF AGRICULTURE.

GROUP NO. 1.

Cantón de Escazú,	San José,	Wheat.
Cantón de Santo Domingo,	Heredia,	Wheat.
Cantón de Paraiso,	Cartago,	Wheat.
Cartago,	Cartago,	Barley.
Zarcero,	Alajuela,	Barley.
San Pedro Calabaza,	Alajuela,	Indian Corn.
Valle de San Carlos,	Alajuela,	Rice.
Turrucares,	Alajuela,	Rice.
Piedras Negras,	San José,	Rice.

GROUP NO. 3.

Federico Tinoco,	Alajuelita,	Cane Sugar, Verbená.
Santa Ana,	Cantón de Mora,	Concrete Molasses,
Pio J. Fernandez,	Grecia,	Cane Sugar.
Ricardo Pfau,	San Pedro del	Honey Exotic.
	Mojón,	

GROUP NO. 4.

Provincia de Cartago,	Costa Rica,	Vegetables.
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GROUP NO. 5.

Cantón de Liberia,	Guanacaste,	Beans.
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GROUP NO. 8.

Francisco Peralta,	San José,	Coffee.
Tournon & Co.,	San José,	Coffee.
San Pedro del Mojón,	San José,	Coffee.
Narciso Esquivel,	San José,	Coffee.
Cantón de Tres Rios,	Cartago,	Coffee.
Cantón de Aserri,	San José,	Coffee.
Gregorio C. Quesada,	Palmares,	Coffee.
J. M. R.,	Palmares,	Coffee.
Rafael M. Nora,	Palmares,	Coffee.
J. G. L.,	Palmares,	Coffee.
J. J. Morera,	Palmares,	Coffee.

Felix Vargas,	Palmares,	Coffee.
J. M. Rodriguez,	Palmares,	Coffee.
C. H. S. Taras,	San Nicolas,	Coffee.
L. Robles,	Navarro,	Coffee.
J. H.,	Cartago,	Coffee.
P. A. Badilla,	Heredia,	Coffee.
J. R. R. Troyo & Co.,	Cartago,	Coffee.
José Hidalgo,	Naranjo,	Coffee.
Alberto Saenz,	Heredia,	Coffee.
Municipio Naranjo,	Naranjo,	Coffee.
J. M. Solera,	Heredia,	Coffee.
Antonio Vargas,	Grecia,	Coffee.
David Guzmán,	Cachi,	Coffee.
Distrito de Orosi,	Cartago,	Coffee.
Cantón de Santo Domingo,	Heredia,	Coffee.
Fernando García,	Cartago,	Coffee.
N. Corrales,	Naranjo,	Coffee.
Santiago Alvarado,	San José,	Coffee.
Manuel Sandoval,	Alajuela,	Coffee.
Otto von Schroter,	San José,	Coffee.
A. and F. Gallardo,	San José,	Coffee.
Silverio Quiroz,	San Ramón,	Coffee.
Jesús Cruz,	San Ramón,	Coffee.
Juan Dent,	El Mojón,	Coffee.
Jesús Alfaro,	San Vincente,	Coffee.
Federico Tinoco,	La Verbena,	Coffee.
A. E. Jimenez,	La Uruca,	Coffee.
Ricardo Montealegre,	Las Pavas,	Coffee.
Virginia B. de Jimenez,	La Uruca,	Coffee.
Emanuel Jimenez,	La Uruca,	Coffee.
José Quiroz,	San Juan,	Coffee.
Teodoro H. Mangel,	San José,	Coffee.
Francisco Orlich,	San Ramón,	Coffee.
Eduado Sell,	San Ramón,	Coffee.
Fabian Esquivel,	San José,	Coffee.
Teodosio Castro,	San José,	Coffee.
José A. Coronado,	San José,	Coffee.
Juan Jenkins,	Atenas,	Coffee.
Barrio de Guadalupe,	San José,	Coffee.
Juan Yte. Acosta,	Grecia,	Coffee.
Ramón N. Gonzales,	Palmares,	Coffee.
Manuel Zamora,	Heredia,	Coffee.
José Zamora,	San Ramón,	Coffee.
Rafael Canas,	Matina,	Cocoa.

GROUP NO. 9.

Cantón de Paraiso,	Cartago,	Collection of Fibers.
Cantón de Liberia,	Guanacaste,	Agave Fibers.
Región de Talamanca,	Talamanca,	Carludovica Palmata.

GROUP NO. 10.

San Carlos,	San Carlos,	Thermal Water.
Province of Cartago,	Costa Rica,	Thermal Water of San Francisco.
Cantón de Escasu,	San José,	Sulphur Water of Santa Ana.
Volcan Miravalles,	Miravalles,	Mineral Water of Rosa Verde.

GROUP NO. 11.

Dr. David J. Guzmán,	San José,	Whisky.
Fábrica Nacional de Licores,	San José,	Cordial, Rum and Cognac.

GROUP NO. 12.

B. Felice & Co.,	San José,	Black Beer.
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GROUP NO. 16.

Augusto Gallardo,	San José,	Coffee Machinery.
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GROUP NO. 17.

Government of Costa Rica,	San José,	Skins of wild animals tanned and dried.
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GROUP NO. 18.

City of San Jose,	San José,	Oils (animal and vegetable).
Fabrica del Aguila,	San José,	Stearine Candles of El Aguila.
José Velazquez,	San José,	Stearine Candles of La José-fina.
Government of Costa Rica,	San José,	Collection of medicinal plants.
Government of Costa Rica,	San José,	Collection of oils.

FORESTRY, FOREST PRODUCTS.

GROUP NO. 19.

San Carlos,	San Carlos,	Collections of coloring plants and barks.
Cantón de Liberia,	Guanacaste,	Collections of gums and resins.
Cantón de Nicoya,	Guanacaste,	Collections of gums and resins.
Valle de San Carlos,	Alejuela,	Collections of gums and resins.
Cantón de Golfo Dulce,	Puntarenas,	Collections of gums and resins.

Cantón de Puriscal, Francisco Valverde,	San José, Heredia,	Collections of gums and resins. Collection of hard and orna- mental woods.
Miguel Pugno,	San José,	Mosaic collection of orna- mental woods.
Government of Costa Rica,	San José,	Collection of building cabinets and dye woods.

DEPARTMENT OF FLORICULTURE.

GROUP NO. 22.

Costa Rica Government,	San José,	Collection of plants.
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DEPARTMENT OF ANIMALS.

GROUP NO. 34.

Museo Nacional de Costa Rica,	San José,	Collection of birds.
Abelardo Borges,	Alajuela,	Butterflies of Costa Rica, Album.

DEPARTMENT OF FISH AND FISHERIES.

GROUP NO. 37.

Government of Costa Rica,	San José,	Shells.
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GROUP NO. 38.

Government of Costa Rica,	San José,	Implements for fishing.
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DEPARTMENT OF MINES AND MINING.

GROUP NO. 42.

Mina Gaudilar,	Puntarenas,	Auriferous quartz from Gau- dilar.
Campania Monte Aguacate, Government of Costa Rica.	Alajuela, San José,	Gold and Silver Ores. Collection of 74 Mineral Ores.

GROUP NO. 44.

Government of Costa Rica,	San José,	Building, Stone, Marble, Ser- pentine, etc.
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DEPARTMENT OF TRANSPORTATION.

GROUP NO. 83.

Santiago Calvo, Cantón de Bagaces, Provincia de Cartago,	San José, Guanacaste, Cartago,	Saddle. Horse Hair Halters, etc. Saddle bags made of fiber.
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DEPARTMENT OF MANUFACTURES.

GROUP NO. 87.

José J. Jimenez,	San José,	Drugs and other preparations.
Carlos D. Brenes,	San José,	Drugs and other preparations.
León H. Santos,	San José,	Drugs and other preparations.
José F. Tristan,	San José,	Drugs and other preparations.
Macial Alpizar,	San José,	Drugs and other preparations.
José M. Ugalde,	San José,	Drugs and other preparations.
Enrique Iglesias,	San José,	Drugs and other preparations.
D. J. Guzmán,	San José,	Drugs and other preparations.
Dr. G. Michaud,	San José,	Chemical products.

GROUP NO. 96.

Francisco Valverde,	Heredia,	Several samples of carved wood.
G. & B. Quesada,	San José,	Silver shovel used in the inauguration of the Atlantic Railroad of Costa Rica.

GROUP NO. 98.

Andres del Valle,	San José,	Gold ornaments for the person.
José Angulo,	Puntarenas,	Gold ornaments for the person.
Julio del Valle,	Cartago,	Gold ornaments for the person.
Ramón Ortiz,	San José,	Gold ornaments for the person.
S. Federici,	La Union,	Ornaments.
Antonio Aguilar,	Puntarenas,	Gold covered ornaments.
Doña Ines Mencía,	Puntarenas,	Tortoise shells.
José Angulo,	Puntarenas,	Gold covered ornaments.

GROUP NO. 100.

Federico Velarde,	Heredia,	Silk Shawls.
Fábrica Herediana,	Heredia,	Silk Shawls.

GROUP NO. 106.

Elisa F. de Duran,	San José,	Embroidered handkerchiefs.
Catalina Fournier,	San José,	Embroidered portraits.

GROUP NO. 118.

Foundry of San José,	San José,	Wrought Iron, Artistic Forging.
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DEPARTMENT OF LIBERAL ARTS.

GROUPS NOS. 149 AND 150.

Joaquín B. Calvo,	San José,	Geography, Statistics and History.
Inspector General of Public Education,	San José,	Statistics and other data.

Department of Education,	San José,	Photographs.
Museo Nacional,	San José,	Annals del Museo Nacional.
Ricardo Fernandez,	San José,	History of Costa Rica, etc.
Juan F. Ferraz,	San José,	Collection of Mexican Words.
Government of Costa Rica,	San José,	Pamphlets.
Vincente Lines,	San José,	Almanacs.
Imprenta Nacional,	San José,	Official Publications.
Dirección de Estadística,	San José,	Census Reports of Republic of Costa Rica.
Dirección de Estadística,	San José,	Census of Costa Rica, 1892.
Lorenzo Montufar,	Guatemala,	Walker in Central America.
Manuel M. Peralta,	Madrid, Spain,	Books, Publications, Atlas, Maps.

GROUP NO. 151.

Rudd & Paynter,	San José,	Photographs.
E. Fradin,	San José,	Hydrographic Surveying.
Francisco Valiente,	San José,	Photographs.

GROUP NO. 153.

Government of Costa Rica,	San José,	Postage stamps, coins, etc.
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GROUP NO. 158.

Maximo Morales,	San José,	Mandolin, Ornamental Woods.
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DEPARTMENT OF ETHNOLOGY.

Julio de Arellano,	San José,	Musical instruments made of clay.
Anastasio Alfaro,	San José,	Catalogue of Archæological Collection at Madrid, 1892.
Dolores Pacheco de Troyo,	Cartago,	Grinding stone and stone stat- ues from ancient graves.
Museo Nacional de Costa Rica,	San José,	Gold, idols, jewels, ornaments found in ancient graves, household utensils, etc.
Right Rev. Bishop Bernardo A. Thiel,	San José,	Household utensils of aborig- ines, etc.
Francisco Montero Barrantes,	San José,	History and geography.
Ministerio de Fomento,	San José,	Paintings, maps of Costa Rica, etc.

RECAPITULATION.

Number of exhibitors, according to the Official Catalogue..... 363

This number is represented as follows—

By the government of Costa Rica..... 205

By individual exhibitors..... 158

Total 363

Individual exhibitors..... 141

Represented in various groups..... 17

Total 158

Number of awards 160

These awards were made as follows—

To the government of Costa Rica..... 56

To individual exhibitors..... 104

Total 160

GIFTS FOR AMERICAN INSTITUTIONS.

At the conclusion of the Fair, most of the Costa Rican exhibits, those of archæology excepted, were presented to various American institutions. The Commission, not being able to comply with the numerous applications received from many places of the United States, and from abroad, and not wishing to break the collections, decided to make a distribution of them as follows:

To the Smithsonian Institution, Washington, D. C. :

A large collection of stuffed animals native to Costa Rica.

To the Department of Agriculture, Washington, D. C. :

A collection of fifty-four varieties of fibers.

To the University of Pennsylvania :

A valuable collection, embracing eighty-seven specimens of ancient pottery, Indian arrows, bow, staff and pellet blow gun; besides, two large show cases and four smaller ones.

To the city of Philadelphia for its museums :

All natural products, agricultural, forestal, mineral, as above described, seventy-eight skins, fishing implements, wines, liquors, oils, etc. A collection of national books, the entire educational exhibit—text books, practical works, etc. A collection of silk and cotton fabrics, a collection of Panama hats: a collection of utensils made of wood, carved, castings from foundries, two models of pieces of statuary, a large collection of photographs, a shield and flags, and eight large show cases.

To the Northwestern University of Chicago :

A collection of plants, roots, barks and seeds.

To the Columbian Museum of Chicago :

Twenty large show cases and twelve fine stone urns with a relief inscription: "Costa Rica en Chicago," as a souvenir of its participation at the World's Columbian Exposition.

I.

MEXICO.

THE TREASURY RECEIPTS.

TOTAL SOURCES OF INCOME.—THE FISCAL YEAR 1894-95.

The Chamber of Deputies, at its meeting of May 11, 1894, approved of the following as the sources of the income of the Republic for the fiscal year beginning 1st July, 1894, and ending 30th June, 1895:

DUTIES ON EXTERIOR COMMERCE.

1. Duties on importation payable in accordance with the general ordinances of the maritime and frontier custom-houses, issued the 12th June, 1891, and their subsequent alterations, explanations and additions.

2. Duties on the exportation of national and cabinet woods of construction, also of dyewoods and mulberry trees in transit from foreign countries in conformity with the law of the 12th December, 1893.

3. Duties of exportation on the following products:

(a) Orchil, at the rate of \$5 per ton of 1,000 kilograms, net weight.

(b) Heniquen, in the rough or worked, at the rate of 70 cents for each 100 kilograms, net weight.

(c) Coffee, at the rate of \$3.50 for every 100 kilograms, net weight.

(d) Hides and pelts, as follows: Those of deer and goats, at the rate of \$2.50 per 100 kilograms, gross weight; those of cattle and others, at the rate of 75 cents per 100 kilograms, gross weight.

(e) Zacaton, or broom root, at the rate of 75 cents per 100 kilograms, gross weight.

(f) Chicle, at the rate of 2 cents per kilogram, net weight.

(g) Ixtle fiber, raw material, at the rate of 2 cents per 100 kilograms, net weight.

(h) Vanilla, at the rate of 40 cents per kilogram, net weight.

4. Duties in transit, in conformity with the existing ordinances of

custom-houses, the law of the 12th December, 1893, and the concessions made to the railway undertakings.

5. Two per cent additional on all the duties of importation in all the maritime and frontier custom-houses, for harbor works, in conformity with the decrees of 25th May, 1881, and 30th November, 1888.

6. Duties imposed by fractions *b* and *c* of Article 4 of the decree of the 28th May, 1881, by way of increase of port dues.

7. Tonnage, lighthouse and warehouse duties in accordance with the general ordinance of custom-houses.

8. Duties on the license to navigate, conformably to the laws of the 8th January and 9th July, 1857.

9. Dues for pilots and port dues, in conformity with the law of 30th January, 1860, and the regulation of 22d April, 1851.

10. Sanitation duties according to the existing laws.

11. Five per cent on the consumption duties which the collectors of taxes may recover in the Federal district and territories on the goods of foreigners, in conformity with the decree of the 11th August, 1875.

12. Duties which may be collected by the consuls, vice-consuls and commercial and consular agents of the Republic, in accordance with the said ordinance of custom-houses, the decree of the 11th November, 1893, and other existing provisions.

13. A charge of \$5 for each certificate issued by the ministers or consuls of Mexico in foreign countries, in conformity with Article 24 of the existing Code of Commerce; in the sense that when the diplomatic and consular agents find themselves under the necessity to obtain the assistance of a lawyer in order to issue such certificates, the lawyer shall be paid by the interested company or firm.

INTERIOR DUTIES PAYABLE IN THE ENTIRE FEDERATION.

14. Proceeds of the stamp taxes :

(a) The general stamp tax on the deeds, documents and contracts which require ordinary stamps, in conformity with the law of the 25th April, 1893, and subsequent enactments or regulations.

(b) Federal contributions on the entire business of the tax collectors' offices in the states and municipalities, which shall be imposed

and collected in the manner presented by the said general law of stamps and subsequent enactments.

(c) The impost on the importation of foreign merchandise which is payable in the stamps with a special counter-signature, as provided by the said stamp law of the 25th April, 1893.

(d) Taxes on the title-deeds and ownership of mines in conformity with the laws of the 8th November, 1893, and the other provisions applicable.

(e) Proceeds of the stamps for the release of fiscal obligations which real estate proprietors ought to pay in accordance with the laws of the 8th November, 1893, and the other provisions applicable.

(f) Taxes on manufactured tobaccos, in conformity with the law of the 10th December, 1892, and the other provisions applicable.

(g) Taxes on alcoholic drinks, in accordance with the law of the 19th May, 1893, the decree of the 15th June of the same year, and subsequent provisions.

(h) Taxes on cotton goods in conformity with the law of the 17th December, 1893.

(i) Charges on the certificates as to signatures, in conformity with Article 1 of the law of the 12th October, 1830.

The payment of this contribution within the national territory shall be made in stamps, and in cash so far as foreign countries are concerned, until the Executive determines that it shall be paid in another form.

15. A contribution on all the wages or emoluments which are authorized in the estimate of expenses or previous laws, which shall be paid in the following proportions: The wages which do not exceed \$602.25, 5 per cent. Those exceeding \$602.25 up to \$1,000.10, 7 per cent. Those exceeding \$1,000.10 up to \$3,000.30, 10 per cent. Those amounting to \$3,000.30 or upward, 10 per cent. Sergeants of the lower grades and civil servants are exempted from this contribution. The Executive shall fix the bases for payment of the contribution on the remuneration of those functionaries, employes, and agents, Federal or otherwise, with or without a fixed salary, who have no definite place in the estimates, by daily installments, and by unchanging annual regulations.

This contribution shall be collected by discounting from the salaries the portion proportionate to the average received.

16. Taxes on smelting, assays and coinage, in conformity with the existing laws; and the taxes which shall be collected in Lower California, in conformity with the resolutions of the Secretary of Finance, of the 8th September, 1893, not including those which are imposed in fraction 22.

17. Taxes on trade-marks at the rate of \$10 for each mark which shall be received by the General Treasury of the Federation.

18. Taxes on patents of invention, in conformity with the law of the 7th June, 1890, and \$10 additional, which shall be paid to the General Treasury of the Federation.

INTERIOR TAXES PAYABLE ONLY IN THE DISTRICT AND TERRITORIES.

19. Direct contributions, land taxes, those on licenses and on professions in the district and territories, in accordance with the laws of the 8th April, 1885, 4th April, 1894, and other subsequent laws and provisions.

20. City tolls in the said district and territories, in accordance with the law of the 10th December, 1892.

21. Duties on successions and donations in said district and territories, in conformity with the law of the 10th December, 1892.

22. Duties of 1 per cent on the value of the metal or mineral substances worked without deducting the cost; and a tax of six per thousand on the value of the metallurgical properties and establishments in the Federal district and territories, in conformity with Articles 4, 5 and 6 of the law of the 6th June, 1887.

23. Notaries' licenses, in accordance with Article 10 of the law of the 29th November, 1867.

24. Licenses for the business agents, in conformity with Article 10 of the law of the 29th November, 1867.

PUBLIC SERVICE.

25. Proceeds of the postoffice.

26. Proceeds of the telegraph lines of the Federal Government.

27. Net profits of the stamps printing establishment and of the printing offices of the Federal Government, conformably to the law

of the 14th December, 1888; subscriptions and sales of the *Diario Oficial*; the *Semanario Judicial* of the Federation, *Diario de los Debates*, and the other printed papers or books acquired or subventioned by the same Government.

28. The net proceeds of the School of Agriculture and of the Industrial School, in accordance with the law of the 14th December, 1888.

VARIOUS PROCEEDS AND PROFITS.

29. Proceeds of the National Lottery.

30. Fines which may be imposed in conformity with the Federal laws, or by the provisions of any decree or authority depending on the Federal Government, with the exception of those which may be directly imposed by the political, judicial or municipal authorities of the Federal district or territories.

31. Premiums for the placing of funds for the national service.

32. Proceeds of national properties.

33. Proceeds of the renting, sale, or recovery of waste (government) lands.

34. Proceeds of the duties on pearl, whale, sea otter, sea wolf, etc., fisheries, in conformity with the existing laws.

35. Products of the leasing, sales or the operating of woods, salt, "guaneras" and other real properties of the Federation, according to the laws, dispositions and contracts, respectively.

36. Proceeds of the capital, vacant properties, furniture, values, shares and rights which, under whatsoever title, belong to the Federation.

37. Gifts and donations in favor of the revenue.

38. Balances of Federal credits, taxes and proceeds not collected in previous years.

39. Profits which may arise from the amortization of the public debt.

40. Return of funds, or liquidation of accounts, or of any other obligations which in conformity with the law belong to the Federal Revenue.

II.

MEXICAN TARIFF MODIFICATIONS.

(Decree from "Diario Oficial," April 30, 1894.)

DEPARTMENT OF FINANCE AND PUBLIC CREDIT.

The President has been pleased to direct me to issue the following decree, to wit:

Porfirio Diaz, Constitutional President of the United Mexican States, to the inhabitants thereof:

Know Ye: That, in the exercise of the authorization conferred on the Executive of the Union by Section 1 of Article I of the Law of Estimates of Receipts, in force May 19, 1893, I have seen fit to decree the following, to wit:

ARTICLE I.

The tariff schedule in force in the service under the General Ordinance of Maritime and Frontier Custom-Houses is hereby modified and enlarged, as hereinafter specified, to read:

Fraction 233. Common bags made of jute, pita grass, hemp, tow and heniquen, gross kilogram, 3 cents.

Fraction 296*a*. Goods not specified of copper, bronze or any other base metal, gilded or plated with silver, whose weight exceeds ten (10) kilograms, legal kilogram, 40 cents.

Fraction 283. Jewelry or trinkets of any metal, save gold, silver or platinum, not gilded or plated with silver, legal kilogram, 50 cents.

Fraction 283*a*. Jewelry or trinkets of any metal save gold or platinum, gilded or plated with silver, legal kilogram, \$1.50.

Fraction 322. Iron in pigs of first smelting, or in filings or scraps, gross kilogram, 2 cents.

Fraction 367. Marble or alabaster, in rough or in powder, gross kilogram, 1 cent.

Fraction 367*a*. Marble and alabaster in sawed slabs, unpolished, gross kilogram, 5 cents.

Fraction 378. Oil, mineral, impure, net kilogram, 3 cents.

Fraction 389. Manufactured goods of alabaster or marble, not specified, when the weight of each does not exceed fifty (50) kilograms, gross kilogram, 25 cents.

Fraction 389*a*. Manufactured goods, not specified, of alabaster or marble, when the weight of each does exceed fifty (50) kilograms, for the first fifty (50) kilograms the preceding rate of 25 cents, and for each kilogram in excess thereof, 15 cents.

Fraction 404. Slabs of marble for floors, dressed only on one side, the other sides being in the rough, of any shape or size, gross kilogram, 1½ cents.

Fraction 406. Slabs of marble for furniture, and slabs with edges polished or carved, gross kilogram, 12 cents.

Fraction 419. Bottles of ordinary glass, without glass stoppers, to hold wines, spirituous liquors and beer, gross kilogram, 1 cent.

Fraction 419*a*. Bottles or flasks of ordinary glass, without glass stoppers, especially designed for holding liquors, provided the name of the liquor or liquid or other substance, or the name of the dealer therein, is indelibly wrought into the glass, gross kilogram, 5 cents.

ARTICLE II.

Hereby are declared null and void the following fractions, to wit:
405. Slabs of marble for floors, in size more than forty (40) centimeters square;

704. Patent pharmaceutical products; and

887. Flower vases, works of art, etc.; also

Note 223 explanatory of fraction 704* (modified by the decree of February 22, 1893).

ARTICLE III.

Explanatory notes, Nos. 107, 125 and 143, of the Tariff Schedule are hereby modified to read as follows:

NOTE 107.—The ingots or pigs referred to in fraction 322 are to be

*Sticking plasters, mustard plasters, etc.

products of the first fusion or smelting of the metal. The filings can be of any thickness; and filings may include chips or shavings. Scraps may include irregular pieces of metal and the refuse designed for smelting.

Iron of first fusion is distinguishable from the coarse forged article by its brittleness. A piece of cast iron, three to four inches square, or of same thickness, placed on the ground, can be broken by five or six blows of a fifteen-pound hammer of the kind called "macho" (sledge) by blacksmiths or iron-mongers, while it is impossible to break the "tocho" or forged iron in the same way.

NOTE 125.—Impure mineral oil is understood to be the product of the first distillation of the shale and crude petroleum. Its color is brown-red, or red in body and green in reflection; it is greasy and of pungent odor. It is unsuitable for lighting purposes, even though it contains a certain proportion of volatile properties.

NOTE 143.—Fraction 419 covers only ordinary bottles of common, clear or opaque glass, and whose form adapts them only for common uses, such as the bottling for sale of wine, spirituous liquors, beers, vinegar, etc.; but fraction 419 does not include bottles having worked indelibly thereon names, marks, figures, or other designs.

ARTICLE IV.

To the notes explanatory of the tariff now in force is added Note 309, referring to fractions 614, 615, and 615*a*, and others of same category of said tariff:

NOTE 309.—The quota of \$3.50 (net kilogram) of fraction 614 shall be levied on goods made of velvet or plush, with silk nap in part or throughout the surface, the warp and woof being solely of cotton, linen or wool, and only the nap being silk.

The quota of \$5 (net kilogram) of fraction 615 shall be levied on goods made of plush or velvet, with nap of silk in part or throughout the surface, the warp being of silk with mixture of cotton, linen or wool. It shall likewise be levied on such goods of plush or velvet whose warp is all silk and whose woof is silk mixed with cotton, linen or wool, or vice versa.

ARTICLE V.

The Treasury Department shall amend the vocabulary annexed to the general customs ordinance in force, in all parts necessary to adapt the same to the modifications and additions to the tariff and to the explanatory notes, subject to the present decree.

ARTICLE VI.

Clause III of Article 293 of the ordinance (see Appendix), is hereby changed to read as follows :

“When it is desirable to convey only coined money, fruits, garden products, fresh vegetables, native beer in casks, fresh meats and live animals.”

ARTICLE VII.

The following regulation for the application of the Tariff is likewise hereby amended to read as follows :

XII. 3d paragraph. “White handkerchiefs, with trimmings, fringes, embroidery or other workings in color shall be considered as colored goods.”*

ARTICLE VIII.

In all fractions of the Tariff wherein one and the same article come under different rates, according to their greater or less weight (save in the case of cloths) duties shall be levied, applying the highest rate up to the limit given as basis therefor and the lesser rate or rates on the number of kilograms in excess of such basal limit.

ARTICLE IX.

This Decree shall take effect on the first day of July next. It shall cover all merchandise imported in vessels making Mexican ports after twelve o'clock (midnight) of June 30 ensuing, and all merchandise entering at the frontier after said hour of said day, the respective Custom-House having received the same.

Ordered published, etc.

(Signed) PORFIRIO DIAZ.

Palace of the Federal Executive, Mexico, April 30, 1894.

To the Secretary of Treasury, etc.

Communicated April 30, 1894.

(Signed) LIMANTONO.

* See regulations for application of Tariff.

[Enclosure No. 3 in 283.]

EXPLANATORY MEXICAN TARIFF MODIFICATIONS-- EXPLANATION OF KILOGRAM WEIGHTS.

NOTES.

Net kilogram is the intrinsic weight of merchandise, without inclosures, wrappings or packings.

Legal kilogram is the weight of merchandise including wrappings, bottles, pasteboard, tin or wooden boxes, inside the outside case.

Gross kilogram is the weight of merchandise inclusive of all wrappings, inside and outside.

III.

MEXICAN NATIONAL LIBRARY.

In his work on "The Riches of Mexico and its Institutions," Adolfo Duclos Salina gives the following facts regarding the libraries of that country:

The establishment of libraries in Mexico dates from a period long before the conquest by the Spaniards in 1521. It is a well-known fact in history that King Itscoalt caused the disappearance of all the written records of his time in which were set down all the old precedents and customs. This he did in order that the people might not know what they were and might despise them on that account. History tells us, too, that the allied Tlaxcaltecas destroyed the library of the city of Texcoco on this being occupied by the conquerors.

The remainder of the traditional records which survived these disastrous fates were almost entirely done away with by the spirit of fanaticism displayed by the first bishop, Zumarraga, and other religious, who saw in all symbolical writings evidences of superstitious idolatry. Later on, some of the historical documents which the initiated Indians had been able to hide were gradually brought to light according as the Crown of Castile gave more stability and a better government organization to its new possessions.

On the establishment of schools, colleges, and universities, and especially convents, throughout the country, libraries were founded, and many of the latter became famous in time for the variety of books which they contained, books treating of all the sciences, arts and languages which were then known, and yet withal there was a great lack of books relating to the languages of the natives.

When independence was won the Government set about the establishment of a national library, and for that purpose issued the decrees of the 26th of October, 1833, the 30th of November, 1846, and the 12th of September, 1875; but these praiseworthy efforts produced no tangible results at that time, for internal revolutions and the foreign interference of which the country was the victim, had previous calls upon the attention and resources of the administration. In later times, on the re-establishment of the Republic, a new decree, sent forth on the 21st of November, 1867, ordered the formation of the library, and for that object the old church of San Agustin was set apart because by its extent and size it fulfilled all the necessary conditions. For the making of the library there were assigned to it all the books of the University and of the College of Santos, which had been already suppressed, as well as those of the Cathedral library, books and documents the greater part of which contain matters of supreme interest for the historian and composer. After the necessary changes had been made so as to suit the building for its new purpose, changes which cost the Government very heavy sums, the solemn opening of the establishment took place on the 2d of April, 1884. The chief hall in the national library is an extensive corridor of some fifty meters long by thirteen wide and thirty-five high. There are on each side of it closing up the arches of the side chapels and the cross-vaults fifteen cedar shelves seven and a half meters high, each of them subdivided into three, which are distinguished from one another by letters. Placed in the middle of the arch, which is above the entrance to the building, is a colossal statue of Time in the act of flying, with the feet upon a black globe which tells the hours of a clock. There are two large medallions, one on each side of the door, with busts in bas relief of President Juarez and the Minister D. Antonio Martinez de Castro, who were the men who issued and authorized, respectively, the decree for the establishment of the library. Facing the doorway at the far end of the hall stands out

upon a large bracket the Mexican eagle, wrought in stucco, and in the middle of a large window covered with frosted glass. Sixteen statues of 2.60 meters high, placed upon tall pedestals complete the adornment of the hall. These represent Walmiky, Confucius, Isais, Homer, Plato, Aristotle, Cicero, Virgil, St. Paul, Origen, Dante, Alarcon, Copernicus, Descartes, Cuvier, and Humboldt.

The two side naves are formed into galleries divided into eight departments. The antechamber through which the hall is entered is paved with colored marble, while the vaulted roof is supported on each side by ten columns of cut stone. The building has on its north and south sides a garden which contains a railing supported by columns, on the tops of which are the busts of the following famous men of Mexico: Netzahualcopotl, poet; D. Manuel Carpio, poet; D. Francisco Sanchez Tagle, poet; Fr. Manuel Navarrete, poet; D. Jose Joaquin Pesado, poet; D. Manuel Eduardo Gorostiza, dramatic author; D. Francisco Javier Clavijero, historian; D. Fernando A. Tazozomoc, historian; D. Fernando A. Ixtlilxochitl, historian; D. Lucas Alaman, historian; D. Manuel Veytia, historian.; D. Fernando Ramirez, antiquarian; Fr. Manuel Nájera, philologer; D. José Bernardo Couto, publisher; D. Manuel de la Peña y Peña, jurisconsult; D. Carlos de Sigüenza y Góngora, humanity; D. José A. Alzate, naturalist; Don Leopoldo Rio de la Loza, chemist; Don Joaquin Cordero, man of letters; Don José M. Lafragua, man of letters.

The National Library, which began existence with 100,000 volumes, has now on its shelves more than 159,000. In addition to the National there are also the following libraries in the capital: The Lawyers' School Library, with 14,000 volumes; the Preparatory School Library, which has 10,000; that of the general record, containing 8,000; the Engineers' School Library, having 7,000; that of the School of Agriculture, with 4,000; the Geographical and Statistical Society's Library, having also 4,000, and those of the Schools of Commerce, Fine Arts, Medicine, the Training School for Men, and the Training School for Women, the School of Arts and Professions for Men, that of the National Conservatory of Music, the Museum Library on the History of Mexico and that of the Judicial Record, which contain 14,538 volumes, making altogether 220,538 volumes contained in the libraries of the City of Mexico which are supported by the Federal Government.

MEXICAN FRUIT INDUSTRY.

A correspondent of the *Two Republics*, published in the City of Mexico, gives the following interesting statement of fruit growing in that Republic:

Very singular ideas for the most part prevail in foreign countries with reference to Mexico. It is thought to be a country of mines and revolutions, of the beautiful and the bizarre. True it is that the thousand hills of this splendidly endowed country contain minerals of some kind or other, and that, with one insignificant exception, every kind of mineral known to science has already been found here. True it is that Mexico years and years ago had revolutions as thick as blackberries, but for something like a score of years Mexico has been as peaceful as a country could possibly be. The old idea that a man could best exhibit his patriotism by slaughtering his fellow-countrymen may be still in vogue in other Spanish-American countries, but it has long been abandoned here. The white wings of peace are over the land.

That Mexico has much of the beautiful and of the bizarre there is no denying. To an American, even, the sights and scenes of Mexico are stranger, more interesting, than those of Europe. Visitors from all countries should come here in shoals, and I believe the day is not far distant when they will come. Year after year the accommodations for travelers have improved and they will continue to improve. The only drawback so far as this city is concerned is the fact that there is no good hotel on the English or American plan here. But that, too, will come. Mexico is moving.

The above is a rather lengthy preface to what my present main object is to accomplish. I wish to forcibly call attention to the fruit-growing capacity of Mexico. How is it that with every possible kind of climate and with soil capable of yielding every known agricultural product to the greatest advantage Mexico exports practically nothing in, say, the way of fruit? The fruit growers of California and Florida have made fortunes by fruit. Mexico could produce, and to greater advantage, all that those States yield and yet only a few thousand dollars' worth of fruit is exported! Mexico's oranges

could be taken into United States markets several weeks ahead of even the Florida. This is an immense advantage in itself—but only some few fruit growers avail themselves of it.

Lemons by the thousands of tons are allowed yearly to fall from the trees and rot on the ground, and yet the United States would be a ready market for all that Mexico could produce. Bananas grow in most of the Mexican States in the greatest profusion. Indeed in some places the difficulty is to prevent their growing. The United States imports yearly some \$5,000,000 worth of bananas, but none of them come from Mexico. Foreigners who visit the country and see tons of fine fruit of almost every description lying rotting on the ground wonder why something is not done to utilize such valuable products.

Then take this very valley of Mexico. It is probable that not one-tenth part of it is under decent cultivation—and yet the City of Mexico has a population of at least 329,000, some say 400,000. Many spots in the valley are admirably adapted for growing certain kinds of fruit and especially for market gardening. In spite of all these facts there is not a fruit grower or market gardener worthy of the name in the whole valley. It follows that fruit, and often vegetables, has largely to be brought here from distant places. Of course, some fruit, such as oranges, bananas, etc., will not readily grow here, if at all, but I am speaking now of such fruit and vegetables as will grow here readily enough. Apples, for instance, although perhaps not of the very best quality, might be produced in the valley to a much greater extent and of a much higher grade than those found here now. In proof of this, I may say that I have myself picked very fair apples off trees in Mixcoac and San Angel, and at the same time gathered delicious figs from adjoining trees.

The reasons why fruit has not hitherto been grown in this country to anything like a satisfactory extent seem simple enough. Mexicans have never given any attention to the matter, and they have seldom introduced good fruit trees from those foreign countries in which the best kinds may be found. Even when they have introduced some—grapes, for instance—not unfrequently the trees are not even pruned afterward. They are allowed to grow wild. Then, when good fruit happens to grow in a particular spot, there is often a lack of means of transportation. For instance, a farmer may have a considerable

quantity of good bananas on his plantation near Tuxpan or some other port. He has not enough fruit, however, nor anything like enough to warrant him in chartering a fruit vessel for the purpose of conveying the product to New Orleans, Galveston, or some other good market. He never thinks of associating with his neighbor in the matter, who, with himself, might furnish enough fruit to make a good cargo. In fact, the farmers of the country possess no power of association whatever.

This state of things will not last long. Already some fruit growers are making shipments of first-class oranges. A scheme for raising bananas on a grand scale near Tuxpan is now being vigorously taken in hand. A few object lessons are needed to show how the thing can be done. These are being supplied, and Mexican fruit growing must gradually come to the front.

ROGER ROUNDABOUT.

IV.

MEXICO.

MISCELLANEOUS NEWS—RESTRICTION OF FOREIGNERS AS TO LAND PURCHASES.

On the 11th of March, 1842, Santa Aña, President of the Republic, acting upon the authority of the Government then existing, issued a decree prohibiting foreigners from acquiring lands within five leagues of the coast. This decree was, in April, 1853, reaffirmed by the Government.

On the 1st of February, 1856, Comonfort, Provisional President, made the following decree :

“No foreigner can, without the permission of the Supreme Government, acquire real estate in the frontier States or Territories except it be twenty leagues distant from the line of the frontier.”

Since the promulgation of the two decrees above mentioned some

of the most prominent lawyers of the Republic have contended that the respective Presidents issuing said decrees were not sufficiently empowered for the purpose ; but admitting their authority to do so, that the decrees were annulled by the constitution of February 5, 1857, on the broad ground and principle of the "rights of man." Therefore it is argued that foreigners have the same right to purchase and hold lands within the proscribed territory as elsewhere.

These contentions have, however, never been formally raised in the courts of the country and the legality of the decrees is tacitly accepted.

The new law, "Terrenos Baldios" (national lands), seems to have given increased force to the action of Presidents Santa Aña and Comonfort.

Article 6 of the law says: "Every inhabitant of the Republic, of full age and with capacity to contract, has the right to denounce Government lands," but adds "the privilege conferred by the present Article shall not annul the limitations established or which may be established by the laws in force in connection with the acquisition by foreigners of real estate in this Republic."

There being in the Constitution no other limitations than those referred to in the decrees of 1842 and 1856 it would seem that the new law is a direct confirmation of the old ones, bearing upon this subject.

Foreigners are therefore reminded that it is important, indeed necessary, that before undertaking to acquire lands within the limits defined, they must in the case of frontier lands obtain permission of the proper government officials, and in the case of coast lands procure the necessary concessions from Congress. It may be remarked, however, that these concessions are readily obtained when the application is properly presented.

It may be well to add in conclusion that Article 30, Section 3, of the Constitution says: "Strangers who acquire real estate in the Republic, or who have children born in Mexico, provided they do not manifest the resolution to conserve their nationality," are considered Mexicans.

In other words, the mere purchase of real estate renders the purchaser a citizen of Mexico unless the reservation of his citizenship is made in the act of purchase.

The Mexican Government has decided to stop the subsidy to Mr. Manuel Romano's line of steamers plying between Tuxpan, Vera Cruz, Coatzacoalcos, Minatitlan, and Frontera, as soon as the term of the present concession expires. The concession was promulgated December 12, 1889, and was to remain in force for five years counted from the date of the inauguration of the service which took place May 26, 1890. The subsidy drawn by Mr. Romano is \$1,000 per round trip, such trip having to be made every twenty or twenty-five days.

From a recent message of President Diaz to the Mexican Congress it appears that the foreign postal business is steadily increasing, the number of packages having increased over 5,000 in the last six months.

The national telegraph lines have been extended 40 kilometers (24.856 miles), and now reach a total of 41,000 kilometers (25,477.40 miles). During the past four months 146 kilometers (90.72 miles) of railroads have been completed. The President says that the completion of the important Tehuantepec road was contracted for. Under this 16 kilometers (9.94 miles) have been constructed and the former work repaired. The completed line now measures 255 kilometers (158.46 miles), and only 40 are lacking for the "termination of this the first interoceanic line in the Republic."

Operations have been begun under the Orozco scheme, for flushing the sewers of the City of Mexico, and the work, it is thought, will be completed by the end of April. Mr. Orozco purposes diverting a continuous supply of water from two lakes, and carrying it along the southern outskirts of the city, and sending it into the sewers from the western end and through the Ramon Guzman Canal, which extends from the Chapultepec road to Nonoalco, the northwestern point of the city. It is believed that the work will be of great benefit to the city from a sanitary point of view.

Mr. Scougall, the engineer who has been engaged in surveying the route for a canal to irrigate 100,000 acres of land in the neighborhood of Camargo, State of Tamaulipas, Mexico, estimates that a capital of \$750,000 will be required for this purpose. The soil and crops of the region are said to be similar to those of the Nile Delta in Egypt, and the company represented by Mr. Scougall, holds a concession for the development of the agricultural resources. The

works comprise a dam some fifteen miles above the San Juan River, which rises in the mountains near Monterey and falls into the Rio Grande nearly opposite Fort Ringold or Rio Grande City, and a canal 90 kilometers (55.93 miles) long, which will reach the city of Reynosa on the Matamoras division of the National Railroad; also a 1,500 feet tunnel, and a short open cut some 25 feet at its deepest part, together with 5,000 feet of fluming along the steep bank of the river San Juan. Provision is also made for lateral or distributing canals, with regulating gates to measure out water from the main canal.

The Scandinavian steamship line to Mexico will probably be established by the beginning of September, 1894. The vessels starting from Copenhagen, Denmark, will call at Gothenburg and either Bremen or Antwerp. West Indian, Central American and Mexican ports will be visited, the terminus being Vera Cruz, Mexico.

According to the Mexican financier, Mr. W. H. Clarke, who has a State concession for the erection of smelting furnaces at Culican, in the States of Sinaloa, Mexico, has purchased the plants of a smelting and mining company, heretofore operating at Crittenden, Ariz., with the intention of putting it up on Mexican soil.

"The Secretary of the Treasury of Mexico," says the Mexican *Financier*, "has recently cleared up a doubt as to the application of the mintage tax on the exportation of silver when associated with baser metals. He reminds custom-house collectors that smelting companies operating under special government concessions enjoy exemption from export duties on argentiferous lead not running higher than seven-thousandths in silver, the regular duties being payable with respect to any silver contained in the lead in excess of the proportion named. Argentiferous lead not exported by the smelting companies is subject to the export duty on its silver contents in excess of three-thousandths. Copper in mattes or bars is exempt from the export tax on silver, when the amount of the latter metal contained in the copper does not exceed fifty-thousandths.

The *Official Gazette* of the State of San Luis Potosi, Mexico, is urging local agriculturists to engage in the cultivation of coffee, for which there is abundance of suitable land in the eastern section of the State. Advices from Mazatlan, Sinaloa, state that preparations are being made for growing coffee in that district. From all parts of the Republic an active inquiry for coffee lands continues to be reported.

Mr. J. H. Hampson, President of the Mexico, Cuernavaca and Pacific Railroad Company, has just returned to Mexico after an absence of several months in the United States. He says that they have just closed a contract with Messrs. Cannell & Co., of Sheffield, England, for 2,300 tons of steel rails and fastenings, which should reach Tampico early in April, and will be sufficient to complete the road to kilometer 75, near Huitzilac, on the south side of the mountains, and overlooking the Cuernavaca Valley.

The grading and masonry work is being finished rapidly. Five large construction camps are located on the line, employing about 1,000 men and 150 teams; and he hopes to have the road built and in operation to Huitzilac by not later than August 1.

In addition to their present equipment, they expect to place an order shortly for fifty wood cars and two more large ten-wheel freight locomotives. The four new passenger coaches now being built at Wilmington, Del., will reach Mexico about May 1.

The line near the city has been changed recently, shortening the distance about two kilometers, besides securing a better alignment, throwing out two railroad and street crossings and avoiding the low land along the Consulado River, which is subject to overflow in the rainy season. This is a great improvement. Trains began running into the city over the new line recently. Two parties of engineers are in the field—one making the final location from Huitzilac to Cuernavaca, and the other running reconnoissance and preliminary surveys from Cuernavaca through to Acapulco. The country through which this road will pass is one of the richest and largest sugar and rice producing districts in Mexico; a large traffic is thought to be assured, and the people interested in these industries expect to double their output as soon as they can secure railroad transportation. In addition to this, the road passes through heavy forests of pine and oak timber near the summit, on the line between Mexico and Cuernavaca, from which a large freight traffic may be secured.

One of the industries that is likely to prosper and become one of the principal ones of the State of Tobasco, is the manufacture of furniture.

Tobasco is very rich in valuable timbers. For centuries, they have been allowed to decay in the forests. Mahogany is seen everywhere, but like the other kinds, it is wasted.

A fortune awaits the manufacturer who would engage in such an industry in that State of our neighboring sister Republic, for there is an abundance of valuable timber at a low price, and labor is cheap.

Mr. William Henry Butler, of the city of New York, through a representative in Mexico, has applied to that Government for a patent of a machine to make cigarettes. He has requested that the patent be extended in the name of the "Bansac Machine Company," a corporation organized under the laws of the State of Virginia, and whose principal office is at Salem, Va.

Recent advices show that there are in the entire Republic of Mexico about 84,000 hectares ($2\frac{1}{2}$ acres each) dedicated to cotton growing, producing 30,000,000 kilograms (66,138,000 pounds), in value about \$18,000,000. The quantity of cotton raised is far from being sufficient to supply the demands of the country. For this reason there are imported annually from the United States about 4,500,000 kilograms (9,920,700 pounds), worth about \$3,000,000. The cotton zone of to-day includes all the Gulf and Pacific States with the exception of Yucatan, but the region best adapted for cotton growing is La Laguna, situated northwest of the State of Durango and southwest of that of Coahuila.

Abundant rains have fallen along the line of the International Railroad and in the district of Laguna, Mexico. This fact insures a good cotton crop this year. The district named is the most important, so far as cotton growing is concerned, in the Republic, and its output is rapidly increasing.

Messrs. W. Broderick Clote and Roberto W. Symon have concluded a contract with the government of Mexico for the purchase of 50,000 acres of land in the State of Sonora, district of Guaymas, lying along the right bank of the river Yaqui, on the condition that the concessionaires settle 100 colonists on the land within three years. The price to be paid is 75 cents per hectare (about two and one-half acres), payable in the bonds of the Government. The privileges and exemptions from taxation usual in such concessions are granted.

A copper smelter is being erected at the Imagen and Begonia copper mines at San José, in the State of Nueva Leon, on the line of the Monterey and Mexican Gulf Railway. The ore is a rich copper, bearing from \$10 to \$16 per ton near the surface. It is thought that at a greater depth the product will be still richer. The enterprise is

in control of parties residing in Monterey, Mr. J. W. Sharpe, of that city, being the manager. Several other strong companies are operating in the San José districts, and excellent results may be looked for.

Mr. Monnom, representing a Belgian syndicate of Brussels, has recently spent in Monterey several weeks making a thorough and exhaustive examination into the business and operations of the Monterey and Mexican Gulf Railway. The Belgian syndicate is the principal owner of the stock of the company, and it is stated that if Mr. Monnom's report is satisfactory the syndicate will assume all the outstanding obligations of the company contracted prior to the appointment of a receiver. In this event, the road will be taken out of the hands of the court and placed solely under the management of the above-mentioned syndicate.

RAMIE.

From the *Two Republics* of May 19, we get the following information as to the introduction of ramie into Mexico:

Ramie was first introduced in Mexico by a Swiss botanist, Benito Boezl, in 1867, who imported a few specimens from the Island of Java. For many years afterward it abounded in the States of Vera Cruz and Puebla in a wild state. Thanks to the indefatigable exertions of General Pacheco (then Minister of Public Works) in 1887 a large number of these plants were planted on the Motzorongo estate, State of Vera Cruz, which served as an incentive to farmers throughout the country.

In the State of San Luis Potosi a company was some time ago organized to raise the ramie plant and extract its fiber. On the Guadalupe farm, in the State of Michoacan, several successful attempts have been made to raise it, and in the State of Morelia, from the districts of Uruapan, Apatzingan, Ario and Tacambaro, samples were sent to the Paris Exposition of 1889, that were declared to be as good as the best specimens of China or India.

In Mexico the ramie plant is known by the names of "Ortiga," "Chinchicastle," etc. In China it is called "Tchon-nia," in Japan "Osjo Karao," and in England "China grass."

The actual production is not great here at present, but the probabilities are that it will largely increase in the near future. As is well known, the plant yields a valuable fiber, but as yet no very successful machine has been invented for extracting it. As a consequence, hand labor has hitherto been mainly used for the purpose.

V.

JAMAICA.

The address of the Governor of Jamaica, Sir Henry Blake, to the Legislative Council, at its meeting on the 7th of March, reviewing the finances and trade of that island, says:

I am glad to be in a position to state that the condition of the island is prosperous. The outlook of trade is promising and the commercial business of the colony is on a sound and satisfactory basis. I observe with satisfaction that the question of improvement in agriculture has begun to engage the attention of the people. Local agricultural societies have been formed, and during the past year the first application has been received in response to the offer of assistance from the Botanic Department made by the Government in 1891. In compliance with an application from the parish of Portland, one of the superintendents of the department visited the locality, where he gave valuable instruction in the planting, pruning and preparation of cacao. The meetings were well attended, and his instructions were received with great interest. I hope that this kind of assistance will be freely applied for in the future. It will be readily given and can not fail to be of material assistance to cultivators.

The current year began with a surplus of £62,159 and the revenue to March 31 is estimated to yield approximately £575,482, making a total of £637,641.

The expenditure of the current year to the 31st of March is estimated at £618,419, which will leave us at the commencement of the coming financial year with an approximate surplus of £19,222.

The estimated revenue for the coming year is £576,475, which, added to the estimated surplus of £19,222, makes a total of £595,497; the estimated expenditure is £613,281. These estimates have been prepared with rigid economy and are £10,227 below the average expenditure of the past four years. The result will be an estimated deficit on the 31st of March, 1895, of £17,584. The large surpluses of the past three years having been absorbed, the time has now arrived when it becomes necessary to restore to the revenue at least a portion of the income abandoned under the provisions of the customs tariff amendment law of 1892, the abolition of poll tax on certain animals Law of 1892, the export duties abolition law of 1891, and the Jamaica Railway Company's law of 1889. These sums amount in the aggregate to about £70,000 a year.

The following revenue laws have been passed by the Legislative Council of Jamaica and approved by the Governor :

1. The duty to be raised under the provisions of Law 10 of 1878, shall, on and after the 8th day of March, 1894, be a duty at the rate of six shillings upon every imperial gallon of rum of the strength of proof as ascertained by the instrument known as Sykes' (or Sikes) hydrometer and the tables of calculations to be used in connection therewith, and so in proportion for any greater or less degree of strength, or any greater or less quantity, in lieu of the duty imposed by section 5 of the Rum Duty Law of 1878 (Law 10 of 1878) as amended by section 1 of Law 8 of 1890.

2. The strength of the rum required to be stated in the bill of parcels, in accordance with section 43 of Law 10 of 1878, shall be the strength ascertained by the hydrometer and tables aforesaid.

3. The fifth paragraph of section 43 of Law 10 of 1878 is hereby amended by the substitution of the words "forty liquid gallons" for "forty gallons."

4. The first paragraph of section 58 of Law 10 of 1879 is hereby amended by inserting after the word "strength" in the seventh line, the words "according to Sykes' hydrometer and the number of gallons at proof."

5. The words "larger quantity" in subsection 13 of section 25 of

Law 35 of 1881 shall be taken to mean and include rum at a higher strength.

6. This law and laws 10 of 1878, 35 of 1881, 11 of 1889, and 8 of 1890 shall be taken and read together as one law and may be quoted as the Rum Duty Laws, 1878-1894.

7. This law shall remain in force until the 1st day of April, 1894, and no longer, unless otherwise provided by any law to be passed in the present session of the Legislative Council.

THE CUSTOMS TARIFF AMENDMENT LAW, 1894.

Be it enacted by the Governor and Legislative Council of Jamaica as follows:

1. On and after the passage of this law and so long as the same remains in force, there shall be levied, collected, and paid unto Her Majesty, her heirs and successors, for the use of the government of this Island, upon the several articles imported into this Island and enumerated in the schedule to this law, the several duties therein set forth in lieu of the duties now payable on the said articles, respectively.

2. The provisions of section 24 of Law 18 of 1877, for ascertaining the value of goods on which the duties are charged according to the value of such goods, are hereby extended and applied to the determining of the value of wines for the purpose of charging the additional duty thereon imposed by this law.

3. This law shall remain in force until the 1st day of April, 1894, and no longer, unless otherwise provided by any other law of this session.

SCHEDULE.

	£.	s.	d.
Ale, beer and porter, per gallon.....	0	0	9
Spirits—			
Brandy, per gallon.....	0	12	6
Gin, per gallon.....	0	12	6
Rum, the products of and imported from British possessions, per gallon	0	12	6
Whisky, per gallon.....	0	12	6
Spirits of wine, alcohol and all other spirits, cordials or spirituous compounds, per gallon.....	0	12	6

Tobacco—

	£	s.	d.
Cigarettes, per pound.....	0	2	6
Manufactured (not being cigarettes or cigars), including cavendish, per pound.....	0	1	6

Wines—

In bulk and in bottle, per gallon.....	0	3	6
And an additional duty on all wines of a value of 16 shillings per gallon and upward, per gallon.....	1	1	6

A recent number of the *Kingston Gleaner* states that a well-known New York business man who is sojourning in Jamaica expresses the opinion that the fruit trade of that island may be largely developed. The export of mangoes in particular, he thinks, can be greatly increased by more careful picking and packing. At present there is great waste in transportation of mangoes to New York city.

The same number of the *Gleaner* stated that the report of the committee appointed at the public meeting to consider the question of ramie cultivation in Jamaica, is decided as to the suitability of the ramie fiber plant for cultivation in that island. It grows well and freely, producing four or five cuttings a year. The general conclusion is that the enterprise would be one of great industrial and commercial promise.

The *Gleaner* also advocates the establishment of a manufactory of perfumes in Jamaica. It says: "Jamaica could produce perfumes both of ordinary and special character in abundance. The conditions of cultivation are exceptionally favorable and the establishment of a flower farm, would, we believe, be a profitable undertaking."

VI.

COMMERCIAL AND INDUSTRIAL INFORMATION.

GIFTS FOR AMERICAN INSTITUTIONS.

At the conclusion of the Fair most of the Costa Rican exhibits—those of archæology excepted—were presented to various American institutions. The Commission not being able to comply with the numerous applications received from many places of the United

States and from abroad, and not wishing to break the collections, decided to make a distribution of them as follows:

To the Smithsonian Institution, Washington, D. C., a large collection of stuffed animals, native to Costa Rica.

To the Department of Agriculture, Washington, D. C., a collection of fifty-four varieties of fibers.

To the University of Pennsylvania, a valuable collection embracing eighty-seven specimens of ancient pottery, Indian arrows, bow, staff, and pellet blow-gun. Besides, two large showcases and four smaller ones.

To the city of Philadelphia, for its museums, all natural products, agricultural, forestal, mineral, as above described, seventy-eight skins, fishing implements, wines, liquors, oils, etc. A collection of national books, the entire educational exhibit, text-books, practical works, etc. A collection of silk and cotton fabrics, a collection of Panama hats, a collection of utensils made of wood, carved, castings from foundries, two models of pieces of statuary, a large collection of photographs, a shield and flags, and eight large showcases.

To the Northwestern University of Chicago, a collection of plants, roots, barks and seeds.

To the Columbian Museum of Chicago, twenty large showcases and twelve fine stone urns with a relief inscription: "Costa Rica en Chicago," as a souvenir of its participation at the World's Columbian Exposition.

BANANA TRADE WITH WEST INDIES AND CENTRAL AMERICA.

It appears that the banana trade of this country with Central America continues to show a steady development. According to the report of the Chief of the Bureau of Statistics, United States Treasury Department, the imports of bananas during eight months ending February 28, 1894, amounted to \$2,685,590, as against \$2,603,339 for the same period of 1893. These figures are the more significant in view of the fact that the business depression, and the large fruit crop of last summer in this country had an appreciable effect upon foreign fruit trade, the price of bananas last fall having been nearly 50 per cent lower than during the previous spring. It is stated that for the twelve months ending July 1, 1893, not less than 133 steamers were engaged in carrying bananas between the West Indies, Central America, Colon, and the United States. In 1892 the receipts of bananas in the port of New York aggregated 3,715,625 bunches; in July, 1893, 567,067 bunches arrived in New York. The largest New York supplies were drawn from Jamaica, 1,058,876 bunches being received

from that island during the year 1893. Cuban ports sent about 600,000 bunches, the remainder of supply coming from Colon, Honduras, Nicaragua, and Costa Rica. In addition to the importations of New York, nearly 2,000,000 bunches, it is stated, went to Philadelphia, and almost as many more to Boston, while Baltimore, Savannah, and Mobile were also large consumers. But New Orleans is the most important market in this country, that city receiving 4,483,351 bunches from Central America during the past year. This is due to the fact that New Orleans is advantageously situated for water transportation from Central American ports, and also for the distribution of the fruit throughout the Mississippi Valley. The total importations into the United States during 1893 are given as having been 12,695,386 bunches.—*Mexican Trader, March 15, 1894.*

SILVER INDUSTRY OF CHILE.

A report prepared by direction of the Sociedad Nacional de Minería (the National Mining Society) on the silver industry of Chile, was recently presented to the Government of that country. At the date of the report, the production is estimated thus:

The silver exported from Iquique, Taltal, Caldera, Coquimbo, and Carrizal, reaches and exceeds.....	300,000 marks.
The silver extracted in the Bella Vista Works, Antofagasta, from ore from Chilian mines exceeds.....	180,000 marks.
The Las Condes, San José de Maipó and other fields yield upward of.....	100,000 marks.
	580,000 marks.
To this quantity the compilers of the report add:	
From Huanchaca.....	350,000 marks.
From Oruro.....	222,000 marks.
Total.....	1,152,000 marks.

Although neither Huanchaca nor Oruro are Chilean fields, the latter belong exclusively to Chileans, while of the 320,000 shares of the former, 101,000 are held by Chileans, and of the "acciones al portador" (share of stock payable to bearer) 4 per cent are held by Chileans. Therefore, the compilers of the report consider that 35 per cent of the production of Huanchaca, calculated in round numbers at 1,000,000 marks, belong to Chileans. The grand total of 1,152,000 marks is equal to 264,960 kilograms of silver. Taking the

production at 1,100,000 marks, and the price at £1 13s per mark, we have a total of £1,243,000, which at 15 pence, the rate of exchange at the date of the report, is equal to \$19,888,000.

From the facts given in the report, it would appear that the prospect for remunerative working of the Chilean silver mines is not encouraging, with the exception of a few exceptionally rich mines. Commenting upon this feature of the report the *Chilean Times* says: "The consequence of such a state of affairs as that depicted by the report is not very agreeable to contemplate. The paralyzation of the silver industry would mean the withdrawal of \$20,000,000 of 15 pence from the annual exports. It would mean the cessation of trade with Bolivia, the loss of a chief source of revenue to the steamship companies, and the partial ruin of agriculture. In order to prevent a catastrophe of this nature, the compilers of the report propose a double standard without any legal ratio between the two metals." And they go on to say: "The solution would be obtained in an agreement to coin in all America a money to be current in all the States, of a fixed weight and standard, to be coined by the Government only. The proportion to be coined by each government might be fixed by agreement, but silver-producing countries would probably prefer not to be bound by a stipulation of this kind. It will be seen from these extracts that the compilers of the report favor bimetallism, and in another part they advocate free coinage of both metals."

URUGUAY.

From official statistics of the agricultural industry of the Republic of Uruguay for the year 1893, which have been published in book form by the Government of that Republic, it appears that 492,296 cuadras of the Uruguayan soil are now under cultivation. The cuadra is a unit of superficial measure equivalent to 1.77 acres, and so the whole area cultivated in Uruguay in 1893 represents 871,363.92 acres. In 1892, only 380,601 cuadras were cultivated, there being therefore, a difference of 111,695 in favor of 1893.

The crops raised on that area, following the order of their respective importance, as marked by the extent of ground devoted to their cultivation, have been wheat, maize, *porotos*, or kidney beans, barley, potatoes, grapes, sweet potatoes, bird seed, peanuts, flax or linen, and oats.

Not less than 3,908 cuadras (6,917.16 acres) were devoted in 1893 to the cultivation of the vine.

Out of the whole population of the Republic (728,447 inhabitants) only 45,064, representing a little over 6.17 per cent of the total, were engaged in 1893 in purely agricultural pursuits. This number exceeds by 7,000 the figures of the preceding year.

Out of the said agriculturists, 11,606 owned the farms or estates which they cultivated, and 10,532 rented them under leases. The balance consisted of farm hands and laborers.

The wheat crop in 1891 amounted to 988,540 hectolitres (2,705,377.666 bushels). In 1892, it grew to 1,160,034 hectolitres (3,292,060.4886 bushels). In 1893 it was 2,009,711 hectolitres (5,703,358.8469 bushels).

From information received, it appears that the new wheat crop in Uruguay is very large. The Review of the River Plate says: "The quantity coming in daily by rail for shipment reminds one of the brisk movement of the Australian grain ports more than anything Uruguay has thus far experienced. The saladeros (meat packing houses) are preparing for heavy business for the next four months."

The National Telegraph Line from Montevideo to Durazne, Uruguay, has been opened to public service, and places the whole national system in communication with Montevideo.

ARGENTINE REPUBLIC.

The Director-General of the National Department of Mines and Geology of the Argentine Republic has submitted to the Minister of Finance an important scheme for an exhaustive exploratory survey of the whole Republic. Hitherto, he says, the want of funds has forbidden any active search after the minerals of the country, but the money recently voted by Congress for explorations in 1894 comes in opportunely for carrying out a project long entertained. The Republic should be divided into sections, each section in charge of a mining engineer of the department under the direction of the chief. The scheme embraces the drawing up of plans of the mineral districts, their geological formation, statistics of mines at work and those unworked, plans of the workings, a description of the mineral produced, the exportation of minerals, mode of communication, etc.,

the whole to be afterward published in the form of an elaborate report. It is anticipated that the project will take a year to carry through. Another object is to complete the collections in the Mineralogical Museum.

The following figures of Argentine commerce for 1893, as compared with 1892, is given in *La Prensa*, a newspaper of Buenos Aires :

	Imports.	
	1892.	1893.
Subject to duty.....	\$77,089,633	\$83,509,102
Duty free.....	14,391,530	12,596,257
Specie.....	6,520,348	4,688,638
Totals.....	\$98,001,511	\$100,793,997

	Exports.	
	1892.	1893.
Subject to duty.....	\$73,916,994	\$49,071,250
Duty free.....	33,892,238	43,632,534
Specie.....	1,979,711	815,585
Totals	\$109,788,943	\$93,519,369

The Minister of Finance of the Argentine Republic has issued a decree regulating the ports-and-wharves law. The Riachuelo and Madero ports are included in the denomination, "ports of the capital." Vessels of over 100 tons are to pay 13 cents daily for each ten of the first 100 tons, and 7 cents daily for each twelve tons over 100. Tugs, small steamers, lighters, boats, etc., pay no entrance dues, but must pay "permanencia" dues. Dues must be paid in gold or equivalent in paper. The entrance dues to be paid the day the vessel enters and the rest before she leaves.

IMMIGRATION TO PARAGUAY.

The second batch of immigrants for the new Australia colony in Paraguay, arrived at Montevideo in February last. It was composed of 165 men, 25 women, and 40 children. This colony is being established under a coöperative plan with socialistic ideas as the basis.

MISCELLANEOUS.

At a recent meeting of the shareholders, at New Orleans, of the British Honduras Mutual Fruit Steamship Company, Limited, it was stated that the directors hope soon to be able to report that all the shares have been taken. The steamers "Gambetta," "Coila," and "Aalesund" have been chartered to run a weekly service between the colony and New Orleans, buying all fruit offered to them at current rates, and carrying all freight between ports, that they can secure at Belize or New Orleans. The first steamer of the line, the "Gambetta," left Belize on the 3d of March, with the purpose of calling at all fruit shipping ports on the route, both going and returning, and leaving Belize for New Orleans on the 8th. During a visit to the "Gambetta," while lying in the harbor of Belize, the Governor of the colony made an address in which he strongly indorsed the effort "to establish a new and additional road to the natural market of the colony, the United States of North America, for the cultivated products of British Honduras."

The Brazilian Government has decided that the proportion of the export duty on coffee now being levied by the Government, shall in future be wholly collected in gold, which will increase the benefit to the Government about three times. This will doubtless be done by act of Congress, and it is believed no difficulty in carrying the measure will be experienced. Coffee represents fully one-half the exports from Brazil, and in the new year, it is estimated that the exportable surplus of that article alone will amount in sterling value to between 25,000,000 and 30,000,000 pounds.

A review of information received of the railway interests in the various South American States shows their general condition to be exceptionally favorable. With hardly an exception, the companies announce large dividends for the stockholders, besides plans and purposes for extending the various lines. The results obtained by

the Great Western of Brazil for the past year, despite the drawbacks created by the unfavorable conditions incident to the existence of civil war, are more satisfactory than any hitherto secured by this enterprise. The report of the Board of Directors of the corporation shows a large increase of traffic. This result is attributable to the large crop of sugar and cotton grown in the territory tributary to the line.

Advices received from San Salvador give information that, with the approbation of the National Congress, the Executive Power has effected a contract with Mr. M. J. Kelly, of London, acting on behalf of an English company, for the completion of the railway to Santa Aña, and its extension to the capital of the Republic. The concession includes the exploitation by the company of the railways—those now built and to be built under the contract—during a period of ninety-nine years.

It is also understood that the English company has contracted with Mr. A. J. Schuzer, a most competent engineer and contractor, to build the lines. A considerable portion of the South American line (nearly one-half) has been already built under a previous contract made with Mr. Schuzer.

Information received indicates an increase in the exports of Chile to Australia. In February last, a vessel was being loaded with 52,000 quintals of nitrate at Iquiqui, and the Chilean Times says: "If colonial farmers take kindly to this splendid fertilizer, Chile may yet be able to pay for her importations of New South Wales coal with nitrate, and perhaps—who knows—there may eventually be a balance in her favor.

The New Tariff of Guatemala.

On November 4, 1893, a new tariff was promulgated in Guatemala, by decree No. 476, reading as follows:

Whereas, owing to the deficiencies and irregularities of the tariff now in force, many difficulties have been found in properly attending to the necessities of the public service, and many doubts have also occurred to the importers in regard to the proper classification and appraisalment of their merchandise,

Therefore, I, JOSÉ MARIA REINA BARRIOS, a General of division in the Army, and the President of the Republic of Guatemala, in use of the faculties vested in me, do hereby decree:

The following tariff of import duties to be paid by foreign merchandise brought into the country shall begin to be in force on the first day of January, 1894.

On the same day the following rules for the application of the new tariff were officially promulgated and appended to it:

Rule first.—Before fixing the amount of the duty to be paid, under the present tariff, by the imported article, the custom-house officers shall examine carefully the material, or materials, out of which the article is made, its form, the use for which it is intended, the name by which it is known in the trade, its quality, and the name given to it by the present tariff according to the nature of its material, its form, or its use or application.

Rule second.—Articles consisting of two or more different materials, and not expressly designated in the present tariff, shall be charged the duty corresponding to the material which prevails, as far as quantity is concerned, in its composition.

Rule third.—Scientific instruments and apparatus which are admitted free, such as barometers, thermometers, and others, shall pay, however, when attached to some dutiable articles, as statues, candelabras, inkstands, etc., the duties corresponding to the articles of which they form a part.

Rule fourth.—The expression “net weight” shall be understood to mean the intrinsic weight of the merchandise, without counting the interior frames (*almas*), containers, or wrappings.

Rule fifth.—The expression “including weight of container” shall be under-

stood to mean only the weight of the interior frames (*almas*), or the immediate individual wrappings, jugs, bottles, flasks, pasteboard, wooden or tin boxes, within which the article is put up, but not the weight of the general box, case, or outer common receptacle.

If the article on which the duty is to be liquidated and paid, "including weight of container," does not come put up separately, but is imported loose inside a box or case or other receptacle, general or external, the weight of the said box, case, or receptacle shall not be taken into consideration, and the duty shall be assessed according to the true weight of the article.

The terms "interior frames" (*almas*) and "wrappings" shall only be accepted, for the purposes of the present tariff, when the objects designated by them have no commercial value.

Rule sixth.—The expression "gross weight" shall be understood to mean the weight of the article, together with the weight of all containers, cord, and wrappings, both interior and exterior.

Rule seventh.—When the imported bundle or bale of merchandise contains some articles upon which the duty is to be levied taking into consideration the weight of the container, and some others, which are dutiable according to their gross weight, the duty shall be assessed as if all of them belong to the former class, plus a fourth of their weight. Nothing shall be paid, then, on account of the outer general box or case.

Rule eighth.—"Common containers" are jugs, bottles, flasks, whether earthen or glass, and cylinders or cases, whether of iron, zinc, tin, copper, lead, wood, pasteboard, tin plate, etc., usually employed to hold the merchandise, and which separately or by themselves do not constitute a special article of commerce, capable of increasing the value of the same merchandise, or of being used independently.

Rule ninth.—When the articles imported in "common containers" have to pay duties according to their net weight, or to their number, no assessment shall be made on the containers themselves; but if the duty is to be levied according to the gross weight, then the containers shall pay as provided in the respective items of the tariff.

Rule tenth.—Such containers as do not fall under the head of "common," as defined in rule eighth, and clearly appear not to correspond to the article held by them, and have a special intrinsic commercial value, either because they constitute a fancy container, or because they can be used for other purposes, shall pay the duty which corresponds to their nature, according to the tariff. In order that this duty may be properly assessed, a previous declaration of these containers shall have to be made.

Rule eleventh.—When the container, whether exterior or interior, is such an article as a safe, a trunk, a valise, a piece of furniture or other dutiable article, it shall not be considered as a mere container, and shall have to pay the proper duties and be included in the declaration.

Rule twelfth.—The cloth or wrapping material used to protect the merchandise in the interior of the bales or bundles shall have to be declared, and shall pay, whatever their quantity and quality may be, such duties as are established in the tariff. But those wrappings or covers, whether oilcloth or tarred canvas, which are used only to protect the merchandise against the action of dampness, and in no larger quantity than is indispensable, shall pay no duty.

Rule thirteenth.—Mixed woolen cloth shall be understood to be only that cloth in which the warp and woof consist entirely of cotton threads, or of threads of other vegetable fiber.

Rule fourteenth.—Mixed silk ribbons shall be understood to be only those ribbons in which the warp and woof consist entirely of cotton, linen, or wool threads.

Rule fifteenth.—Mixed silk goods or articles shall be understood to be those in which the warp and woof consist entirely of threads of some vegetable fiber.

Rule sixteenth.—Jewels and all kinds of manufactured articles, subject to pay duty according to their net weight, shall pay, however, for the individual cases (*estuches*) containing them; and the said cases or *estuches* shall have to be declared, in order that the corresponding duty may be assessed on them according to the tariff. But such articles as are assessed in the tariff, together with their cases or *estuches*, shall not require this especial declaration.

Cases or *estuches* shall be those cases of wood or pasteboard, covered with cloth or leather, or those wooden cases varnished, painted, ornamented or lined interiorly with leather or cloth, fitted up to contain one or more articles in the proper corresponding places or positions.

Rule seventeenth.—When the interior wrapping, label, or container of a chemical or pharmaceutical article, gives it a name different from the one set forth in the declaration, the duty shall be, even in case that the real name proves to be the one under which the article was declared, the heaviest one assessed by the tariff, either on the article designated by the interior wrapping, label, or container, or on the real imported article.

Rule eighteenth.—When the merchandise is imported in iron cases, trunks, tanks, or cylinders, whether metallic or of some other analogous material, provided with special locks, the interested party shall be bound to open the said cases, trunks, or containers, so as to allow the proper examination to be made; otherwise the merchandise shall not be cleared.

Rule nineteenth.—When chemicals or pharmaceutical articles are imported in unusual containers, or have been intentionally and for the purpose of render-

ing their examination difficult, put up either in opaque recipients, or in recipients closed in such a way as to prevent the customs officer from ascertaining exactly their nature, the importer shall be bound to present to said officer as many of these recipients, already open, as he may ask. Otherwise the merchandise shall not be cleared.

Rule twentieth.—Salts and chemical compounds, assessed generically in two different ways in separate items of the tariff, shall pay according to the item in which the duty is heavier.

Rule twenty-first.—“Salts in powder” shall be those clearly shown to have been packed or put up in that form. If the salts packed or put up in powder have become hardened in such a way as to render further pulverization by mechanical process necessary, they shall have to pay as salts in lumps, or crystals.

This rule shall be applicable to all kinds of powders, except pulverized resins or gum-resins, which if once pulverized shall always pay as if in powder, even if hardened and strongly conglomerated into pieces.

Rule twenty-second.—The term *purity* used in the tariff in reference to chemical substances shall not be understood in its strict scientific acceptation. The fact that the imported article meets all the organoleptic characteristics corresponding to the pure substance itself, shall be sufficient for the purposes of the tariff.

Rule twenty-third.—“Salts prepared to be used as fertilizers” shall have to show very clearly their impure character, so that no room may be left for doubt as to the real use for which they are intended.

Rule twenty-fourth.—Salts, whether neuter, acid, or basic, shall always pay the same duty, except in those cases in which the tariff has established the difference. So the bisulphate of soda, or sulphate acid of soda, shall pay the same duty as the sulphate, or sulphate neuter of soda, named in the tariff.

Rule twenty-fifth.—The gun cotton named in the tariff is the substance used to prepare collodium and celluloid, containing less proportion of nitric acid and being less explosive than the gun cotton employed to make explosive compounds.

Rule twenty-sixth.—Dutiable merchandise contained in scientific instruments, cases, or other articles, which under the present tariff are admitted free, shall not be considered as a part of the latter.

Rule twenty-seventh.—Firearms whose importation is not forbidden shall not be allowed to be taken out of the custom-house until after the proper permit of the Government has been presented and filed.

Rule twenty-eighth.—When letter paper and envelopes are imported in cases containing both articles in equal quantity, the duty shall be assessed in such a way as to cause one-third of the total weight to represent the weight of the envelopes and the other two-thirds to represent the weight of the paper.

Rule twenty-ninth.—When wines or liquors are imported in wooden casks, the reduction of their quantity to litres shall be made by deducting one-fourth from the number of kilograms representing the gross weight of the article, as, for instance: 100 kilograms, gross weight, shall represent 75 litres of liquid, or the 75 per cent on the total gross weight.

Double casks shall not be taken into account in making this operation.

One litre is equal to 1.4486 bottles.

Rule thirtieth.—The following schedule shall be followed for the reduction of all brandies to 20° Beaumé, when their alcoholic strength exceeds that density:

One litre of brandy of—

	Litres.		Litres.
20°	= 1.00	30°	= 1.52
21°	= 1.08	31°	= 1.56
22°	= 1.14	32°	= 1.59
23°	= 1.20	33°	= 1.64
24°	= 1.24	34°	= 1.67
25°	= 1.30	35°	= 1.72
26°	= 1.36	36°	= 1.77
27°	= 1.40	37°	= 1.78
28°	= 1.44	38°	= 1.81
29°	= 1.48	39°	= 1.81

Rule thirty-first.—Buildings and complete houses, or the parts thereof, whether iron or frame, named in the section of this tariff referring to articles admitted free, do not include nails, paint, and iron articles not appearing in their proper place.

Rule thirty-second.—“Curtains in the piece,” as mentioned in items 239 and 240 of the present tariff, are those joined by the continuation of the thread in the weaving, and whose borders or patterns are separated by a small space which allows for cutting.

The same shall be understood in regard to sheets, shawls (*perrajes*), and other articles of analogous character, which pay different duty when imported in the piece or separate.

Rule thirty-third.—Such duties as levied by the present tariff on articles *not specified*, or *not mentioned*, are not absolute. When the imported article is unknown, either on account of its material or of its form, and can not be assessed under any item of the tariff, the importers may, if they so choose, make an application to the director-general of the customs service, who, upon examination of the samples presented to him and of the explanations made, shall consult the Secretary of the Treasury and decide as to the duty to be levied on the new article.

Rule thirty-fourth.—Ten per cent shall be allowed to be deducted under the head of “damage” (*avería*) from the duty on wines, liquors, brandies,

ales, ginger ale, sa*saparilla, beer, and sweet oil, when imported in glass containers; but this allowance shall not be made when the wines are medicinal.

The same allowance of 10 per cent shall be made for the same reason on articles of glass or crockery for domestic purposes, on chimneys, globes, and screens for lamps, and on empty flasks, bottles, and demijohns to be used as containers, when imported in separate bundles or boxes.

Rule thirty-fifth.—All articles of food which at the time of the custom-house examination may be found to be in a state of decomposition, shall be ordered by the authorities to be thrown out, or buried, without delay.

SUPPLEMENTARY DECREE OF DECEMBER 20, 1893.

Whereas, by an executive decree, marked No. 476, and dated November 4, 1893, a new tariff was ordered to be put in force on the 1st of January, 1894.

And whereas, under a previous decree, No. 405, of December 20, 1887, it was established that an additional duty of 15 per cent on the total assessment made by the custom-houses should be levied; and under article 5 of another decree, No. 207, of April 21st, 1893, a further additional duty of 7 per cent on the same total is to be paid by the importers for the Northern Railroad.

And whereas the new tariff contains no provision repealing either of the said decrees:

And whereas, the Government being animated by the desire of favoring the importation of merchandise, has deemed it advisable to reduce the said 22 per cent now levied, to only 15 per cent, out of which the Northern Railroad may take its 7 per cent, the balance of 8 per cent being then left for other public works:

Therefore, I, the President of the Republic, do hereby decree:

First. On and after the 1st of January, 1894, no other additional duty shall be levied and collected than that of 15 per cent established by decree No. 405.

Second. The amount yielded by this duty shall be distributed as follows: 7 per cent for the Northern Railroad; 4 per cent for the waterworks of this capital and the works of drainage of the same; and 4 per cent for the building of a custom-house, at such a place as may be hereafter designated at the depot of the Northern Railroad.

Third. The Secretary of the Treasury shall take such measures and communicate such instructions as may be necessary for the execution of this decree.

National Palace, Guatemala, December 20th, 1893.

REINA BARRIOS.

By the President:

SALVADOR HERRERA,

Secretary of the Treasury and Public Credit.

TARIFF.

SECTION FIRST.—PROHIBITED ARTICLES.

No. of item in—		Articles.
English translation.	Guatemalan tariff.	
1	1	Apparatus for coining money.
2	2	Arms (fire), breech-loading or repeating, of calibers .58, .50, .44, and .43.
3	3	Balls and bullets (iron or lead), bombs, grenades, and all other projectiles of war.
4	4	Cannons and pieces of artillery.
5	5	Carbines, rifles or muskets of the class used by the national army.
6	6	Cartridges for rifles, fowling-pieces, and revolvers of all kinds and calibers.
7	11	Gunpowder of all classes.
8	8	Money (counterfeited).
9	9	Nitrate of potash or saltpeter, in quantities exceeding 10 kilograms.
10	10	Nitroglycerine and dynamite.
11	7	Prints, engravings, books, or objects, obscene and contrary to morals and good customs.
12	12	Rifles, Evans, Winchester, or Remington.
13	14	Tobacco leaf.
14	13	Whistles of the kind used by the police.

SECTION SECOND.—FREE LIST.

15	26	Advertisements printed, lithographed, or engraved on paper, or pasteboard, without frame.
16	20	Alphabets, wooden, of all classes, for schools.
17	23	Anchors and hauling lines.
18	25	Animals, live.
19	24	Animals, stuffed, prepared for cabinets of natural history.
20	27	Apparatus for the fabrication of gas lighting.
21	28	Apparatus, electrical, except the chemical substances used in the same which are dutiable.
22	29	Apparatus and engines to put out fires (fire engines and appurtenances).
23	16	Areometers.
24	31	Argil, sand, or fine sand in natural state.
25	65	Articles imported by the Government, or the municipalities, for public service, or the service of charitable institutions.

SECTION SECOND.—FREE LIST—Continued.

No. of items in—		Articles.
English translation.	Guatemalan tariff.	
26	66	Articles imported by the President of the Republic for his own use.
27	67	Articles imported by foreign ministers residing in the Republic, when for their own use, or the use of their families, in quantities proportionate to the ordinary use, provided that the privilege is reciprocal and that the rules made on the subject are duly complied with. Secretaries of legation, consuls and vice consuls do not enjoy this privilege.
28	22	Asbestos, in fiber, or plate, in natural state.
29	127	Bags, empty, ordinary, of yut, pita, henequen, or manila hemp, for exporting products of the country.
30	69	Baggage of passengers, the term being understood to mean articles of clothing and apparel for the individual use of the passenger, and such instruments, already used, as are indispensable for his art and trade, said articles and instruments in proportionate quantity; and manufactured tobacco in quantity not exceeding half a kilogram per person.
31	37	Bank notes.
32	36	Barometers.
33	83	Beans.
34	40	Boats, tackle, sails, chains, oars, and other equipments for vessels, for use in the ports, canals, rivers, and lakes of the Republic.
35	98	Books, printed, paper covered.
36	96	Bricks, fire, for foundry furnaces.
37	64	Buildings, frame or iron, complete.
38	41	Buoys of iron, with the apparatus to put them in their proper place.
39	45	Cable of iron or steel wire, of all thicknesses.
40	46	Capsules of porcelain or glass for chemical or pharmaceutical uses.
41	76	Cases of mathematical instruments and for blow pipe assays.
42	49	Catalogues of all classes, paper covered.
43	53	Cement, roman, common lime, and hydraulic lime.
44	50	Charts, geographical, topographical, and nautical.
45	95	Closets, inodorous, of all classes, except the piping thereof.
46	47	Coal, animal coal, and charcoal, except when pulverized.
47	35	Codfish, dried, salted, or smoked.
48	54	Coke.
49	55	Collections, numismatic, geological, or of natural history, for museums and cabinets.
50	44	Compasses, mariners, of all classes.
51	60	Copy books, of samples for drawing, penmanship, or embroidery.
52	57	Cork, in plates, or unmanufactured.
53	58	Crucibles of all kinds and cupels.
54	59	Crystal, rock, not manufactured.
55	62	Cultures, or bacteriological preparations.
56	63	Drawings, patterns, and models, whether paper or pasteboard, for the arts.
57	71	Emery, in powder, or in grain.
58	86	Engravings, made by Guatemalan artists residing abroad, their authenticity being proved, without frame.
59	52	Felt, for roofs.
60	78	Filters, stone, unpolished.
61	79	Filters, Pasteur.

SECTION SECOND.—FREE LIST—Continued.

No. of item in—		Articles.
English translation.	Guatemalan tariff.	
62	80	Filters of compressed coal.
63	82	Fragments of wrecked vessels.
64	84	Fruits, fresh.
65	93	Furnaces and other instruments of clay or graphite for assays of metals.
66	56	Glasses, graduated, and probetas, whether graduated or not,
67	135	Glasses, plate, of all colors and sizes.
68	39	Globes, glass, for electric incandescent light.
69	70	Globes, terrestrial and celestial.
70	87	Gramma.
71	72	Grass, broom-grass, or Spanish broom (<i>Esparto</i> .)
72	108	Gold and silver, in bullion, in dust and coined.
73	88	Guano and all other natural or artificial fertilizers
74	99	Guides (<i>guías</i>), or fuses for mines.
75	91	Hay and all other forage not specified.
76	61	Hides, not tanned.
77	133	Ink, printing.
78	92	Iron, in ingots, or forged in bars, plates, and square rods.
79	102	Lard.
80	112	Lightning rods.
81	77	Lights, for light-houses, or harbor lights.
82	99	Locomotives, wagons, cars, implements, and other railroad material.
83	100	Lumber, unmanufactured, in logs.
84	103	Machinery, electrical, and electrical batteries, not charged, to be used in the public service.
85	94	Magnet, native loadstone, or magnetized steel.
86	101	Maize.
87	48	Meats, smoked or salted.
88	104	Models for machines and buildings.
89	106	Molds, for making artificial flowers.
90	113	Newspapers, single numbers.
91	75	Oakum, for ships.
92	15	Oleic, acid, impure, for making soap.
93	68	Packings or wrappings, common, when the articles covered or protected by them are not appraised on the gross weight. In bundles or bales the wrapping cloth, oiled cloth, side boards and straps shall be considered as falling under the provisions of this item. The same will be the case with the zinc, or tin lining, card board, paper and casings, when not expressly assessed, if the merchandise comes in boxes or cases. Blankets, sheets, and other articles dutiable under the present tariff shall not be deemed to be wrappings.
94	109	Palm leaf for the manufacture of hats.
95	111	Papier mâché for building purposes.
96	105	Patterns and samples for drawings, penmanship, and embroidery.
97	90	Peas (<i>guisantes</i>).
98	85	Pease (<i>garbanzos</i>).
99	114	Petroleum, crude.
100	81	Photographs, or views of the country, without frames.
101	42	Pitch, prepared, for ships.

SECOND SECTION.—FREE LIST—Continued.

No. of items in—		Articles.
English translation.	Guatemalan tariff.	
102	120	Plants, alive.
103	121	Platinum, in bars or pieces, and in dust.
104	30	Plows of all kinds, and the parts thereof, loose.
105	51	Porte-reactives, or portative pocket cases for chemical re-agents (<i>porta-reactivos</i>).
106	126	Portraits of persons residing in the country, without frames.
107	110	Potatoes and all other similar alimentary roots.
108	122	Presses, printing and lithographing.
109	123	Pulp, wooden; rags, scraps, ravelling, and other refuse material for manufacturing paper.
110	38	Pumps, iron, of all classes.
111	124	Pus, vaccination, or cow-pox.
112	33	Quicksilver.
113	125	Rakes for agricultural purposes.
114	43	Refuse, mineral (<i>brozas minerales</i>).
115	32	Rice, in grain.
116	107	Samples without commercial value, and those having some commercial value if the duty to be levied on them does not exceed \$1.
117	130	Seeds, of flowers, vegetables, and others not specified.
118	128	"Soy," or Japanese sauce.
119	118	Slates, or imitation thereof, for schools.
120	119	Slates for roofing purposes.
121	73	Spatulas and spoons, and bars or rods of glass or porcelain to stir up corrosive liquids.
122	74	Stearine, in cakes.
123	17	Still, metallic, holding less than half a gallon, for chemical operations.
124	117	Stones, grinding.
125	115	Stones, natural, of all kinds, not polished, for industries and manufactures, not specified.
126	116	Stones, precious, and fine pearls, not mounted.
127	34	Sulphur, native, in lumps.
128	129	Tallow, in masses or cakes, and melted.
129	21	Tar, of coal.
130	132	Thermometers.
131	131	Tiles, wooden or shingles, clay or glass, for roofing purposes.
132	134	Types, printing.
133	97	Vegetables, fresh.
134	18	Wire, iron, galvanized, or copper, isolated, intended for electrical transmission.
135	19	Wire, iron, galvanized, smooth or barbed, for fencing purposes, and fasteners and stretchers therefor.

The following articles shall be admitted free, if coming from the United States of America as stipulated in the reciprocal commercial arrangement made with that country (Legislative decree No. 172).

If coming from other nations they shall pay such duties as are provided for in the respective items of the present tariff.

No. of items in—		Articles.
English translation.	Guatemalan tariff.	
136	137	Asphalt.
137	138	Balconies of cast or wrought iron.
138	143	Barley.
139	148	Books, printed, bound.
140	141	Charts, maps, and geographical globes.
141	147	Corn meal.
142	136	Cotton-seed oil and other products of cotton seed.
143	142	Houses, frame or iron, complete, or in parts.
144	146	Kitchens, or stoves, iron.
145	144	Lattices, or window blinds, of wood or metal.
146	149	Lumber and timber in the rough, or prepared for building purposes.
147	150	Machinery, including steam machinery for agriculture and mining and separate parts of the same.
148	151	Marble in slabs, columns, cornices, door and window frames and fountains, and dressed or undressed marble for buildings.
149	152	Materials for the construction and equipment of railways.
150	153	Materials for electrical illumination.
151	154	Materials expressly for the construction of wharves.
152	155	Music, printed.
153	140	Piping of clay, glazed or unglazed, for aqueducts and sewers.
154	156	Pitch.
155	139	Railings of cast or wrought iron.
156	157	Resin.
157	145	Rye.
158	158	Tiles, shingles, and tiles of clay or glass for roofing and construction of buildings.
159	159	Turpentine.

All products and manufactured articles of the Central American territory shall be admitted free in Guatemala, on condition of reciprocity.

Brandies shall be excepted from this rule, as they shall pay according to the provisions of the present tariff. Prohibited articles, and articles already monopolized, or to be hereafter monopolized by the Government, are also excepted.

SECTION THIRD.—COTTON ARTICLES.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
160	165	Albs, cotton lace, plain, figured, or embroidered... each..	8.00
161	166	Albs, muslin, or cotton lawn (<i>linón de algodón</i>), with or without trimmings..... each..	6.00
162	252	Aprons, cotton, with or without cotton trimmings, in- cluding weight of container..... kilo..	4.00
163	171	Baby-walkers, cotton, with or without appurtenances, in- cluding weight of container..... kilo..	4.00
164	174	Bandanas, cotton, gross weight..... kilo..	.80
165	175	Belts or sashes (<i>bandas</i>), cotton, knit, including weight of container..... kilo..	1.30
166	176	Belts or sashes (<i>bandas</i>), cotton, woven, plain, figured, or embroidered, including weight of container..... kilo..	2.00
167	173	Bibs, cotton, with or without trimmings, including weight of container..... kilo..	4.00
168	268	Blankets, cotton, of all classes, gross weight..... kilo..	.50
169	182	Blonde lace, cotton, white or colored, including weight of container..... kilo..	3.50
170	183	Blouses, any kind of cotton goods, for men and boys, in- cluding weight of container..... kilo..	2.50
171	184	Blouses, any kind of cotton goods, plain or with trim- mings or embroidery, for women and girls, including weight of container..... kilo..	3.00
172	185	Blouses, any kind of cotton goods, with trimmings or em- broiderings of wool or linen, for women or girls, in- cluding weight of container..... kilo..	4.00
173	186	Blouses, any kind of cotton goods, with trimmings or embroidings of silk, for women, or girls, including weight of container..... kilo..	6.00
174	188	Bombasi, white or colored, including weight of container, kilo..	.80
175	370	Braid, cotton, plain, or scalloped, white or colored, including weight of container..... kilo..	1.00
176	191	Brilliantine, white or colored, gross weight..... kilo..	.70
177	338	Brocatelle (<i>platillas</i>), cotton, gross weight..... kilo..	.45
178	190	Buttons covered with any cotton material, including weight of container..... kilo..	2.00
179	193	Calico, cotton, gross weight..... kilo..	.45
180	198	Cambric (<i>cambray</i>), cotton, white, gross weight..... kilo..	1.00
181	199	Cambric (<i>cambray</i>), colored, stamped or percale like, gross weight..... kilo..	.85
182	200	Cambric, coarse (<i>cambrayón</i>), white or colored, gross weight..... kilo..	.70
183	207	Canvas (<i>cañamazo</i>), cotton, including weight of con- tainer..... kilo..	1.00
184	303	Canvas (<i>lona</i>) for sails, cotton, gross weight..... kilo..	.30
185	279	Caps (<i>gorros</i>), cotton, plain or embroidered, with or with- out visors..... dozen..	4.00
186	280	Caps (<i>gorros</i>), cotton embroidered with wool or silk, with or without visors..... dozen..	6.00

SECTION THIRD—COTTON ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemalan tariff.		
			<i>Dollars.</i>
187	269	Cases (<i>fundas</i> and <i>sobrefundas</i>), cotton, plain, without any trimmings or embroiderings, including weight of container.....kilo..	1.00
188	270	Cases (<i>fundas</i> and <i>sobrefundas</i>), cotton, with trimmings or embroiderings of cotton, including weight of container.....kilo..	1.50
189	201	Chemises, cotton, plain, for women or girls, including weight of container.....kilo..	2.50
190	202	Chemises, cotton, trimmed or embroidered with cotton, for women or girls, including weight of container.....kilo..	4.00
191	247	Collars, cotton, plain.....dozen..	1.50
192	248	Collars, cotton embroidered.....dozen..	3.00
193	249	Collars, cotton lace, with or without trimmings of wool, linen, or silk.....dozen..	5.00
194	225	Comforters (<i>colchas rellenas</i>), padded with cotton, and covered with any kind of goods not containing silk, including weight of container.....kilo..	1.00
195	230	Cord, or braids (<i>cordón</i> , or <i>trenza</i>), cotton, including weight of container.....kilo..	1.75
196	323	Corduroy (<i>pana de pelo recortado</i>) cotton, white or colored, plain or figured, including weight of container.....kilo..	1.00
197	231	Corsets, cotton, including weight of container.....kilo..	1.75
198	295	Cotton, domestic, (<i>género de familia</i>), gross weight.....kilo..	.45
199	168	Cotton, raw, with or without seeds, gross weight.....kilo..	.03
200	169	Cotton, prepared for padding, including weight of container.....kilo..	.40
201	310	Cotton sheeting (<i>manta</i>) and cotton drill (<i>manta drill</i>), unbleached, gross weight.....kilo..	.30
202	311	Cotton sheeting (<i>manta</i>), colored, and cotton drill (<i>manta drill</i>), white or colored, gross weight.....kilo..	.50
203	224	Counterpanes or coverlets (<i>colchas</i>), cotton, all classes, gross weight.....kilo..	.50
204	354	Counterpanes (<i>sobrecamas</i>), cotton, net-work, covered, or not covered, with any material of cotton, wool, or linen, including weight of container.....kilo..	3.50
205	355	Counterpanes (<i>sobrecamas</i>), cotton, net-work, covered with any goods of pure or mixed silk, including weight of container.....kilo..	6.00
206	208	Covers, table, or others (<i>carpetas</i>), cotton, including weight of container.....kilo..	1.00
207	209	Covers, table, or others (<i>carpetas</i>), cotton, knit or crochetwork, with or without fringe of the same material, including weight of container.....kilo..	3.50
208	264	Covers (<i>forros</i>) for umbrellas, parasols, or shades, cotton, sewed together or in pieces, including weight of container.....kilo..	1.00
209	245	Crape, cotton, plain, or figured, including weight of container.....kilo..	3.00
210	228	Cravats or neckties, cotton, including weight of container.....kilo..	2.00

SECTION THIRD.—COTTON ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
211	229	Cravats, or neckties, cotton, with trimmings of wool or silk, including weight of container kilo..	4.00
212	244	Creas, cotton, colored, for mattresses, pillows, or other articles, gross weight kilo..	.45
213	246	Cretonne, cotton, colored, for curtains, furniture covers, or other uses, gross weight kilo..	.70
214	291	Cretonnes, or cotton prints (<i>indianas</i> , or <i>zarazas</i>), cotton, gross weight kilo..	.70
215	343	Cuffs for shirts, cotton dozen of pairs..	2.50
216	308	Cuffs, for ladies (<i>manguillos</i>), cotton, plain, with or without collars dozen of sets..	3.00
217	309	Cuffs, for ladies (<i>manguillos</i>), cotton, figured or embroidered, with or without collars dozen of sets..	6.00
218	239	Curtains, cut, or in the piece, cotton museline, or lawn, stamped, plain, or embroidered, including weight of container kilo..	3.50
219	240	Curtains, cut, or in the piece, cotton lace, plain, or embroidered, including weight of container kilo..	3.50
220	241	Curtains, cotton, crochet, or network, including weight of container kilo..	3.50
221	242	Curtains and drapery (<i>sobrecortinas</i>), made out of such cotton goods as damask, cretonne, or others similar, including weight of container kilo..	2.00
222	167	Damask (<i>alemanisco</i>), cotton, gross weight kilo..	.70
223	250	Damask (<i>damasco</i>) cotton, white, gross weight kilo..	.70
224	251	Damask (<i>damasco</i>), cotton for curtains or furniture covers, gross weight kilo..	.80
225	253	<i>Diablo fuerte</i> , cotton, strong, plain or ribbed, gross weight kilo..	.60
226	194	Drawers, cotton, knit, including weight of container kilo..	1.30
227	195	Drawers, cotton, including weight of container kilo..	2.00
228	196	Drawers or pantalets, cotton, plain and without trimmings, for women or girls, including weight of container kilo..	2.50
229	197	Drawers, or pantalets, cotton, trimmed or embroidered, for women or girls, including weight of container kilo..	3.00
230	367	Dresses, or suits, ready-made, any kind of cotton goods, not specified, and the parts thereof when sewed together, of all classes and patterns, even if trimmed with cotton lace, embroidered strips of cotton or linen, silk ribbons, or ornaments of ordinary metal, for adults or children over 8 years of age, including weight of container kilo..	5.00
231	368	Dresses, or suits ready-made, any kind of cotton goods not specified, and the parts thereof when sewed together, of all classes and patterns, trimmed with silk or with any material containing silk, for adults or children over 8 years of age, including weight of container kilo..	6.00

SECTION THIRD.—COTTON ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala tariff.		
			<i>Dollars.</i>
232	369	Dresses, or suits, ready-made, any kind of cotton goods, not specified, and the parts thereof when sewed together, of all classes and patterns, having skirts, or overskirts of cotton lace, for adults or children over 8 years of age, including weight of container.... kilo..	6.00
233	371	Dresses and suits, ready-made, any kind of cotton goods, of all classes and patterns, with or without trimmings of the same material, for children under 8 years of age, including weight of container kilo..	3.00
234	372	Dresses and suits, ready-made, any kind of cotton goods, of all classes and patterns, with or without trimmings, or embroiderings of linen, wool, or silk, for children under 8 years of age, including weight of container, kilo	4.00
235	233	Dress patterns, such cotton goods as cretonne (<i>indiana</i>), brilliantine, zephyr, or others similar, with trimmings gross weight..... kilo..	1.00
236	234	Dress patterns, such cotton goods as cretonne (<i>indiana</i>), brilliantine, zephyr, or others similar, trimmed or embroidered with cotton, including weight of container, kilo	2.00
237	235	Dress patterns, such cotton goods as cretonne (<i>indiana</i>), brilliantine, zephyr, or others similar, trimmed or embroidered with any kind of material which is not cotton, including weight of container kilo..	4.00
238	236	Dress patterns, such cotton goods as cambric, museline, lawn (<i>linón</i>), or others similar, without trimmings, gross weight..... kilo..	1.00
239	237	Dress patterns, such cotton goods as cambric, museline, lawn (<i>linón</i>), or others similar, trimmed or embroidered with cotton, including weight of container kilo..	4.00
240	238	Dress patterns, such cotton goods as cambric, museline, lawn (<i>linón</i>), or others similar, trimmed or embroidered with any kind of material which is not cotton, including weight of container kilo..	6.00
241	254	Drill, cotton, white or colored, gross weight..... kilo..	.60
242	255	Drill, cotton, imitation of cassimere, gross weight. kilo..	.60
243	259	Edgings (<i>espiguilla</i>), cotton, including weight of container..... kilo..	3.00
244	344	Embroidery (<i>randa</i>), cotton, including weight of container..... kilo..	3.00
245	364	Embroidery, or embroidered cotton strips, for insertions or edgings (<i>tiras bordadas</i> or <i>caladas</i>), including weight of container..... kilo..	3.00
246	365	Embroidery, or embroidered cotton strips, for insertions or edgings (<i>tiras bordadas</i> or <i>caladas</i>), the embroidering being made with wool, linen, or silk, including weight of container kilo..	6.00
247	260	<i>Estribillas</i> , cotton, gross weight..... kilo..	.45

SECTION THIRD.—COTTON ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
248	361	Fabrics, cotton, not specified, including weight of container kilo..	1. 25
249	177	Flags, any cotton material, including weight of container kilo..	1. 00
250	266	Flannel, cotton, gross weight kilo..	. 60
251	263	Fringe (<i>flecós</i>), cotton, including weight of container kilo..	3. 00
252	267	Fringe (<i>franjas</i>), cotton, including weight of container kilo kilo..	2. 00
253	299	Frock coats, any cotton goods each..	2. 00
254	339	Gaiters, or leggings (<i>polainas</i>), any cotton material, with or without appurtenances, including weight of container kilo..	1. 00
255	275	Galloon, cotton, including weight of container kilo..	2. 00
256	300	Garters, cotton, with or without elastic, including weight of container kilo..	2. 00
257	276	Gauze, cotton, plain, white, gross weight kilo..	. 70
258	277	Gauze, cotton, plain, white, laundred, including weight of container kilo..	1. 00
259	278	Gauze, cotton, figured, or embroidered at loom, including weight of container kilo..	1. 50
260	216	Girths, saddle, cotton, including weight of container kilo kilo..	1. 00
261	281	Gloves, cotton, knit, including weight of container kilo..	3. 50
262	282	Hammocks, cotton, including weight of container kilo..	1. 00
263	283	Hammocks, cotton, network, including weight of container kilo..	1. 50
264	328	Handkerchiefs, cotton lawn or muslin, plain, figured, or embroidered, gross weight kilo..	1. 00
265	329	Handkerchiefs, such cotton material as madapolam, jeans, or bandana, serge-like, or imitation of silk, <i>paleacates</i> , or others similar, gross weight kilo..	. 70
266	330	Handkerchiefs, cotton tulle, plain or embroidered, gross weight kilo..	3. 00
267	221	Headresses or caps, for women (<i>cofias</i>), cotton, plain, trimmed, or embroidered dozen..	6. 00
268	222	Headresses or caps, for women (<i>cofias</i>), cotton lace, or lawn, plain or embroidered dozen..	8. 00
269	223	Head dresses or caps, for women (<i>cofias</i>), cotton, with linen, wool, or silk trimmings dozen..	10. 00
270	290	Imperial cotton cloth (<i>imperial</i>), gross weight kilo..	. 45
271	256	Insertions (<i>embutidos</i>), cotton, including weight of container kilo..	3. 00
272	292	Irish cotton cloth (<i>irlanda</i>), gross weight kilo..	. 45
273	212	Jackets or sacks, any kind of cotton goods, for men each..	2. 00
274	213	Jackets or sacks, any kind of cotton goods, plain or with cotton trimmings, for women each..	2. 00
275	214	Jackets or sacks, cotton, trimmed with linen or wool, for women each..	3. 00
276	215	Jackets or sacks, cotton, trimmed with silk, for women, each each..	4. 00

SECTION THIRD.—COTTON ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
277	227	Jeans (<i>coquillo</i>), cotton, gross weight.....kilo..	.45
278	296	Jerseys, cotton, knit, plain, trimmed, or embroidered, including weight of container.....kilo..	2.60
279	258	Lace, cotton, including weight of container.....kilo..	3.50
280	297	Lama, cotton, gross weight.....kilo..	.80
281	298	Lasting, cotton, gross weight.....kilo..	.80
282	301	Lawn (<i>linón</i>), cotton, plain, gross weight.....kilo..	1.00
283	302	Lawn (<i>linón</i>), cotton,* figured or embroidered, at the loom, including weight of container.....kilo..	2.00
284	322	Lawn (<i>olán</i>), cotton, gross weight.....kilo..	.45
285	265	Linings (<i>forros</i>), any material of cotton, of all classes, for hats, including weight of container.....kilo..	2.00
286	160	Loops, curtain (<i>abrazaderas</i>), cotton, with tassels and cords, even if the inside frame (<i>alma</i>) of the latter is made of any other material, including weight of con- tainer.....kilo..	2.00
287	304	Lustring, cotton, with spangles of ordinary metal, includ- ing weight of container.....kilo..	4.00
288	305	Lustring, cotton, fine, with spangles of gold or silver, in- cluding weight of container.....kilo..	8.00
289	306	Madapolan, cotton, gross weight.....kilo..	.45
290	314	Mantelets and mantillas, cotton network, including weight of container.....kilo..	3.50
291	315	Manufactures of cotton, knit, not specified, including weight of container.....kilo..	1.30
292	319	Mosquito nets, cotton, including weight of container, kilo..	1.00
293	320	Muslin, cotton, stamped, gross weight.....kilo..	1.00
294	321	Muslin, cotton, white, gross weight.....kilo..	1.00
295	226	Nankeens (<i>coletas</i>), cotton, gross weight.....kilo..	.45
296	353	Napkins, damask, cotton, including weight of container, kilo.....	.85
297	347	Nets, fishing of all kinds, including weight of container, kilo.....	.25
298	307	Netting (<i>mallas</i>), cotton, including weight of container, kilo.....	3.00
299	325	Pants, any kind of cotton material.....each..	2.00
300	356	Parasols (<i>sombrillas</i>), any kind of cotton material, plain, and without trimmings.....each..	.30
301	357	Parasols (<i>sombrillas</i>), any kind of cotton material, with trimmings or embroiderings of cotton, wool, or linen, each.....	.80
302	358	Parasols (<i>sombrillas</i>), any kind of cotton material, with silk trimmings.....each..	1.25
303	333	Passementerie, cotton, including weight of container, kilo.....	3.00
304	336	Percales, cotton, white or colored, gross weight.....kilo..	1.00
305	257	Petticoats, or underskirts (<i>enaguillas</i>), ready-made, cot- ton, gross weight.....kilo..	.50

SECTION THIRD.—COTTON ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
306	271	Petticoats or underskirts (<i>fustanes</i>), ready-made, cotton, plain, including weight of container kilo..	2.00
307	272	Petticoats or underskirts (<i>fustanes</i>), ready-made, cotton, trimmed or embroidered with the same material, including weight of container kilo..	3.00
308	273	Petticoats or underskirts (<i>fustanes</i>), cotton, in patterns, plain, without trimmings, including weight of container kilo..	1.00
309	274	Petticoats or underskirts (<i>fustanes</i>), cotton, in patterns, embroidered or trimmed with cotton, including weight of container kilo..	1.50
310	337	Piqué, cotton, white or colored, including weight of container kilo..	.80
311	261	Plush (<i>felpa</i>), cotton, including weight of container kilo..	1.00
312	262	Plush (<i>felpilla</i>), cotton, including weight of container kilo..	2.00
313	340	Poplins, cotton, with or without hemp wool, including weight of container kilo..	1.50
314	187	Purses for money, including weight of container kilo..	2.00
315	178	Robes (<i>batas</i>), cotton, plain, trimmed, or embroidered with the same material each..	* 6.00
316	179	Robes (<i>batas</i>), shaggy, for bathing, including weight of container kilo..	.70
317	180	Robes (<i>batas</i>), cotton, trimmed or embroidered with wool or linen each..	8.00
318	181	Robes (<i>batas</i>), cotton, trimmed or embroidered with silk each kilo..	10.00
319	348	Royal, cotton, gross weight kilo..	.45
320	360	Royal cloth (<i>tela real</i>), cotton, white or colored, gross weight kilo..	1.00
321	351	Sándalo cloth, cotton, white or colored, plain or serge-like, gross weight kilo..	.70
322	170	Sandals (<i>alpargatas</i>), cotton, with soles of broom grass (<i>esparto</i>), or of hemp, including weight of container, kilo kilo..	.50
323	220	Sashes, cotton with or without elastic, plain or embroidered, including weight of container kilo..	2.00
324	345	Sateens (<i>raso de algodón</i>), white or colored, gross weight, kilo kilo..	.80
325	327	Shawls (<i>pañolones</i>), cotton, plain, figured, or shaggy, including weight of container kilo..	1.50
326	346	Shawls (<i>rebozos</i>), cotton, all kinds not exceeding 2.20 meters in length by 0.50 meters in width each..	1.00
327	352	Shawls (<i>sarapes</i>), cotton each..	3.00
328	349	Sheets or covers (<i>perrajes</i>), cotton, white or colored, separate or in the piece, including weight of container, kilo kilo..	1.00
329	350	Sheets, cotton, napped, including weight of container, kilo kilo..	.70

SECTION THIRD.—COTTON ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatema- lan tariff.		
			<i>Dollars.</i>
330	203	Shirts, cotton, white or colored, with or without collars and cuffs, for men or boys, including weight of container kilo..	2.50
331	204	Shirts, cotton, white or colored, with linen bosoms, white or colored, with or without collars and cuffs, for men or boys, including weight of container kilo..	3.50
332	205	Shirts, cotton, embroidered, including weight of container kilo..	3.50
333	334	Shirt bosoms, cotton, plain, including weight of container kilo..	1.50
334	335	Shirt bosoms, cotton, embroidered, including weight of container kilo..	2.00
335	293	Slips, layette, or sets of baby linen (<i>jaticos</i>), cotton, plain, trimmed, or embroidered with cotton, including weight of container kilo..	8.00
336	294	Slips, layette, or sets of baby linen (<i>jaticos</i>), cotton, trimmed or embroidered with linen, wool, or silk, including weight of container kilo..	10.00
337	192	Socks, cotton, for men or boys, including weight of container kilo..	1.30
338	363	Suspenders, cotton, with or without appurtenances, including weight of container kilo..	4.00
339	316	Stockings, cotton, including weight of container kilo..	1.30
340	312	Tablecloths, damask (<i>damasco</i>), cotton, including weight of container kilo..	1.00
341	313	Tablecloths, damask (<i>alemanisco</i>), cotton, including weight of container kilo..	1.00
342	359	Tarletan, cotton, white or colored, including weight of container kilo..	1.00
343	217	Tape, cotton, white or colored, gross weight kilo..	.50
344	218	Tape, cotton, white or colored, with clasps or endings of metal, including weight of container kilo..	1.00
345	219	Tape, cotton, with elastic, up to 4 centimeters in width, including weight of container kilo..	1.00
346	189	Tassels, cotton, even if the inside frame (<i>alma</i>) is of material different from cotton, including weight of container kilo..	2.00
347	284	Thread, cotton, in balls, large or small, or in skeins, for sewing, embroidering, or crochet work, including weight of container kilo..	.70
348	285	Thread, cotton, white or colored, in wooden spools, gross weight kilo..	.40
349	286	Thread, cotton, white or colored, in spools of other materials, gross weight kilo..	.60
350	243	Ticking, cotton, imitation of Guatemalan article, gross weight kilo..	.45
351	172	Tidies (<i>antimacasares</i>), cotton, plain or embroidered, including weight of container kilo..	3.00

SECTION THIRD.—COTTON ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
352	326	Towels (<i>pañós de mano</i>), white or colored, smooth or shaggy, including weight of container.....kilo..	.70
353	366	Towels (<i>tohallas</i>), cotton, white or colored, smooth or shaggy, including weight of container.....kilo..	.70
354	164	Trimmings (<i>adornos</i>), any cotton material, white or colored, including weight of container.....kilo..	3.00
355	341	Tulle, cotton, plain, including weight of container.....kilo..	3.00
356	342	Tulle, cotton, wholly or in part figured or embroidered, including weight of container.....kilo..	3.50
357	331	Umbrellas, any cotton material.....each..	.40
358	332	Umbrellas, small, any cotton material.....each..	.30
359	206	Undershirts, cotton, knit, including weight of container.....kilo..	1.30
360	362	Velvet, cotton, white or colored, plain or figured, including weight of container.....kilo..	1.00
361	324	Velvetine (<i>panilla</i>), cotton, white or colored, gross weight.....kilo..	.60
362	211	Vests, ready made, any kind of cotton material.....each..	1.50
363	232	Vest patterns, pique or any other cotton material, including weight of container.....kilo..	1.50
364	317	Wicks, cotton and paper, for cigar-lighters, including weight of container.....kilo..	1.60
365	318	Wicks, cotton, for lamps, including weight of container, kilo.....	.50
366	161	Wraps, cotton lace, with or without trimmings of cotton, including weight of container.....kilo..	2.00
367	162	Wraps, cotton lace, with trimmings of wool or linen, including weight of container.....kilo..	3.00
368	163	Wraps, cotton lace, with trimmings of silk, including weight of container.....kilo..	6.00
369	287	Yarn, cotton, bleached or unbleached, for knitting, gross weight.....kilo..	.12
370	288	Yarn, cotton, red, gross weight.....kilo..	.28
371	289	Yarn, cotton, any color not red, gross weight.....kilo..	.20
372	210	Zephyrs, gross weight.....kilo..	.80

SECTION FOURTH.—LINEN ARTICLES.

373	378	Albs, linen lace, plain, figured, or embroidered....each..	10.00
374	379	Albs, batiste (<i>olán batista</i>), pure or mixed, with or without trimmings or embroiderings.....each..	6.50
375	450	Aprons, pure or mixed linen, with or without trimmings, including weight of container.....kilo..	5.00
376	384	Baby-walkers, pure linen, or linen mixed with cotton, with or without appurtenances, including weight of container.....kilo..	6.00

SECTION FOURTH.—LINEN ARTICLES—Continued.

Number of items in—		Article.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
377	388	Belts or sashes (<i>bandas</i>), pure or mixed linen, knit, including weight of container kilo..	2.00
378	387	Bibs, pure or mixed linen, including weight of container, kilo	5.00
379	392	Blond lace, pure or mixed linen, including weight of container kilo..	4.50
380	393	Blouses, pure or mixed linen, for men or boys, including weight of container kilo..	3.50
381	394	Blouses, pure or mixed linen, plain, trimmed, or embroidered, for women or girls, including weight of container kilo..	4.50
382	395	Blouses, pure or mixed linen, trimmed or embroidered with wool or silk, for women or girls, including weight of container kilo..	8.00
383	531	Braid, pure or mixed linen, plain or scalloped, including weight of container kilo..	3.00
384	505	Brocatelle, pure or mixed linen, including weight of container kilo..	1.50
385	397	Buttons, covered with any material of pure or mixed linen, including weight of container kilo..	3.00
386	404	Cambric (<i>cambray</i>), white, or batiste, pure or mixed linen, including weight of container kilo..	1.50
387	405	Cambric (<i>cambray</i>), colored, stamped, printed, pure or mixed linen, including weight of container kilo..	1.75
388	406	Cambric, coarse (<i>cambrayón</i>), white or colored, pure or mixed linen, including weight of container kilo..	1.00
389	412	Canvas (<i>cañamazo</i>), pure or mixed linen, including weight of container kilo..	1.50
390	483	Canvas, for sails (<i>lona</i>), pure or mixed linen, including weight of container kilo..	.40
391	467	Caps, pure or mixed linen, plain, or with embroidering, with or without visors dozen..	6.00
392	468	Caps, pure or mixed linen, with trimmings, or embroiderings of wool or silk, with or without visors dozen..	9.00
393	381	Carpeting or matting (<i>alfombra</i>), in rolls or pieces, hemp, jute, or oakum, plain, figured, or shaggy, gross weight kilo..	.30
394	382	Carpets or rugs, ready-made, hemp, jute, or oakum, gross weight kilo..	.50
395	460	Cases (<i>fundas</i> and <i>sobrefundas</i>), pure or mixed linen, plain and without any trimmings, including weight of container kilo..	1.50
396	461	Cases (<i>fundas</i> and <i>sobrefundas</i>), pure or mixed linen, trimmed or embroidered, including weight of container, kilo	2.50
397	407	Chemises, pure or mixed linen, plain, for women or girls, including weight of container kilo..	4.00
398	408	Chemises, pure or mixed linen, embroidered or trimmed with linen, for women or girls, including weight of container kilo..	6.00

SECTION FOURTH.—LINEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
399	445	Collars, pure or mixed linen, plain .....dozen..	2.00
400	446	Collars, pure or mixed linen, embroidered .....dozen..	4.50
401	447	Collars, lace, pure or mixed linen, trimmed with wool or silk .....dozen..	7.00
402	432	Cord or braid (<i>cordón</i> or <i>trenza</i>), pure or mixed linen, including weight of container .....kilo..	2.00
403	433	Corsets, pure or mixed linen, with or without trimmings, including weight of container .....kilo..	2.00
404	517	Counterpanes, net work, pure or mixed linen, covered or not covered with cotton or wool, including weight of container .....kilo..	5.00
405	518	Counterpanes, network, pure or mixed linen, covered with silk, including weight of container .....kilo..	8.00
406	428	Counterpanes or coverlets (<i>colchas</i>), pure or mixed linen, including weight of container .....kilo..	.75
407	413	Covers, table, or others (<i>carpetas</i>), pure or mixed linen, including weight of container .....kilo..	1.50
408	414	Covers, table, or others (<i>carpetas</i>), crochet or network, pure or mixed linen, with or without fringe of the same material, including weight of container .....kilo..	6.00
409	457	Covers (<i>forros</i>) for umbrellas, parasols, or shades, sewed together or in pieces, pure or mixed linen, including weight of container .....kilo..	1.50
410	444	Crape, pure or mixed linen, plain or figured, including weight of container .....kilo..	4.50
411	430	Cravats or neckties, pure or mixed linen, including weight of container .....kilo..	3.00
412	431	Cravats or neckties, pure or mixed linen, trimmed with wool or silk, including weight of container .....kilo..	6.00
413	441	Creas, pure or mixed linen, colored, for mattresses, pil- lows, or other articles, including weight of container, kilo .....kilo..	.80
414	442	Creas, pure or mixed linen, white, including weight of container .....kilo..	1.00
415	509	Cuffs, pure or mixed linen, for shirts .....dozen of pairs..	4.00
416	485	Cuffs for ladies (<i>manguillos</i>), pure or mixed linen, plain, with or without collars .....dozen of sets..	4.50
417	486	Cuffs for ladies (<i>manguillos</i>), pure or mixed linen, trimmed or embroidered, with or without collars, dozen of sets .....dozen of sets..	9.00
418	439	Curtains and drapery (<i>cortinas</i> and <i>sobrecortinas</i>), pure or mixed linen, white or colored, plain or embroidered, in- cluding weight of container .....kilo..	6.00
419	440	Curtains, crochet or net work, pure or mixed linen, in- cluding weight of container .....kilo..	4.50
420	380	Damask (<i>alemanisco</i>), pure or mixed linen, including weight of container .....kilo..	1.00
421	448	Damask (<i>damasco</i>), pure or mixed linen, including weight of container .....kilo..	1.00

SECTION FOURTH.—LINEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
422	449	Damask (<i>damasco</i>), pure or mixed linen, colored, for furniture covers, curtains, or other uses, including weight of container kilo..	1. 00
423	400	Drawers, pure or mixed linen, knit, including weight of container kilo..	2. 00
424	401	Drawers, pure or mixed linen, including weight of container kilo..	3. 00
425	402	Drawers or pantelets, pure or mixed linen, plain and without any trimmings, for women or girls, including weight of container kilo..	3. 00
426	403	Drawers or pantelets, pure or mixed linen, trimmed or embroidered, for women or girls, including weight of container kilo..	4. 50
427	528	Dresses or suits, ready-made, any goods of pure or mixed linen, not specified, and the parts thereof when sewed together, of all classes and patterns, even if trimmed with cotton or linen lace, embroidered strips of cotton or linen, silk ribbons, or ornaments of ordinary metal, for adults or children over 8 years of age, including weight of container kilo..	10. 00
428	529	Dresses or suits, ready-made, any goods of pure or mixed linen, not specified, and the parts thereof when sewed together, even if trimmed with silk or with material containing silk, for adults or children over 8 years of age, including weight of container kilo..	12. 00
429	530	Dresses or suits, ready made, any goods of pure or mixed linen, not specified—and the parts thereof when sewed together—having skirts and overskirts of cotton or linen lace, for adults, or children over 8 years of age, including weight of container kilo..	12. 00
430	532	Dresses or suits, ready made, of all classes and patterns, any goods of pure or mixed linen, with or without trimmings of wool, or linen, for children under 8 years of age, including weight of container kilo..	6. 00
431	533	Dresses or suits, ready made, of all classes and patterns any goods of pure or mixed linen, with trimmings of silk, for children under 8 years of age, including weight of container kilo..	8. 00
432	436	Dress patterns, any goods of pure or mixed linen, plain or percale like, without any trimmings, for ladies, including weight of container kilo..	3. 00
433	437	Dress patterns, any goods of pure or mixed linen, trimmed or embroidered with linen, for ladies, including weight of container kilo..	4. 00
434	438	Dress patterns, any goods of pure or mixed linen, trimmed or embroidered with wool or silk, for ladies, including weight of container kilo..	6. 00
435	451	Drill, pure or mixed linen, white or colored, gross weight, kilo .....	. 80

SECTION FOURTH.—LINEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			Dollars.
436	398	Duck (<i>brin</i> or <i>bramante</i>), pure or mixed linen, unbleached, gross weight.....kilo..	.30
437	455	Edgings (<i>espiguilla</i>), pure or mixed linen, including weight of container.....kilo..	3.50
438	510	Embroidery (<i>randa</i>), pure or mixed linen, including weight of container.....kilo..	4.50
439	525	Embroidery, or embroidered strips for insertions or edgings (<i>tiras bordadas</i> or <i>caladas</i>), pure or mixed linen, including weight of container.....kilo..	3.50
440	526	Embroidery, or embroidered strips, for insertions or edgings, pure or mixed linen, the embroidering being made with wool or silk, including weight of container.....kilo..	9.00
441	522	Fabrics, pure or mixed linen, not specified, including weight of container.....kilo..	2.00
442	456	Fringe (<i>flecos</i>), pure or mixed linen, or hemp, including weight of container.....kilo..	3.50
443	459	Fringe (<i>franjas</i>), pure or mixed linen, or hemp, including weight of container.....kilo..	3.00
444	479	Frock coats, ready made, any material of pure or mixed linen.....each..	3.00
445	506	Gaiters, or leggings (<i>polainas</i>), pure or mixed linen, with or without appurtenances, including weight of container.....kilo..	2.00
446	466	Galloon, pure or mixed linen, including weight of container.....kilo..	3.00
447	480	Garters, pure or mixed linen, with or without elastic, including weight of container.....kilo..	3.00
448	420	Girths, saddle, pure or mixed linen, including weight of container.....kilo..	2.00
449	469	Gloves, pure or mixed linen, knit, including weight of container.....kilo..	5.00
450	470	Hammocks, any material of pure or mixed linen, including weight of container.....kilo..	1.50
451	471	Hammocks, hemp, pita, or jute, net work, including weight of container.....kilo..	2.00
452	497	Handkerchiefs, pure or mixed linen, plain, including weight of container.....kilo..	4.50
453	498	Handkerchiefs, muslin or batiste, pure or mixed linen, plain, trimmed, or embroidered, including weight of container.....kilo..	8.00
454	425	Head-dresses or caps (<i>coflas</i>), pure or mixed linen, plain, trimmed, or embroidered.....dozen..	8.00
455	426	Head-dresses or caps (<i>coflas</i>), pure or mixed linen lace or lawn (<i>linón</i>), plain trimmed or embroidered....dozen..	10.00
456	427	Head-dresses or caps (<i>coflas</i>), pure or mixed linen, with trimmings of wool or silk.....dozen..	12.00
457	453	Insertions, pure or mixed linen, including weight of container.....kilo..	3.50
458	475	<i>Irlanda</i> , Irish cloth, pure or mixed linen, including weight of container.....kilo..	1.50

SECTION FOURTH.—LINEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala tariff.		
			<i>Dollars.</i>
459	416	Jackets or sacks, any material of pure or mixed linen, for men.....each..	4.00
460	417	Jackets, or sacks, any material of pure or mixed linen, plain and without any trimmings, for women.....each..	4.00
461	418	Jackets, or sacks, any material of pure or mixed linen, with woolen trimmings or embroideries, for women.....each..	5.00
462	419	Jackets, or sacks, any material of pure or mixed linen, with trimmings or embroideries of pure or mixed silk, for women.....each..	6.00
463	478	Jerseys, pure or mixed linen, knit, plain, trimmed, or embroidered, including weight of container.....kilo..	4.00
464	454	Lace, pure or mixed linen, including weight of container.....kilo..	4.50
465	494	Lawn (<i>olán</i>), pure or mixed linen, including weight of container.....kilo..	1.50
466	481	Lawn (<i>linón</i>), pure or mixed linen, including weight of container.....kilo..	1.50
467	482	Lawn (<i>linón</i>), pure or mixed linen, figured or embroidered at the loom, including weight of container.....kilo..	3.00
468	458	Linings (<i>forros</i>), any material of pure or mixed linen, for hats, including weight of container.....kilo..	3.00
469	373	Loops, curtain (<i>abrazaderas</i>), pure or mixed linen, with tassels and cords or strings, even if the inside frame (<i>alma</i>) of the latter is made of any other material, including weight of container.....kilo..	3.00
470	489	Mantelets and mantillas, net work, pure or mixed linen, including weight of container.....kilo..	4.50
471	490	Manufactures of pure or mixed linen, not specified, including weight of container.....kilo..	2.00
472	492	Mosquito nets, pure or mixed linen, including weight of container.....kilo..	1.20
473	493	Muselines, pure or mixed linen, white or colored, including weight of container.....kilo..	1.25
474	429	Nankeens (<i>coletas</i>), pure or mixed linen, including weight of container.....kilo..	.80
475	516	Napkins, damask (<i>damasco alamanisco</i>), pure or mixed linen, including weight of container.....kilo..	2.00
476	512	Nets, fishing, all kinds, pure or mixed linen or hemp, including weight of container.....kilo..	.50
477	484	Netting (<i>mallas</i>), pure or mixed linen, including weight of container.....kilo..	3.00
478	443	Osnaburg (<i>creguela</i>), pure or mixed linen, including weight of container.....kilo..	1.00
479	495	Pants, any material of pure or mixed linen.....each..	3.00
480	519	Parasols, pure or mixed linen, plain and without any trimming.....each..	.80
481	520	Parasols, pure or mixed linen, trimmed or embroidered with cotton or wool.....each..	1.50

SECTION FOURTH.—LINEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			Dollars.
482	521	Parasols, pure or mixed linen, trimmed or embroidered with silk each..	2.00
483	501	Passementerie, pure or mixed linen, including weight of container kilo..	3.50
484	452	Petticoats, or underskirts (<i>enaguas interiores</i>) ready made, pure or mixed linen, woven or knit, including weight of container..... kilo..	2.50
485	462	Petticoats, or underskirts (<i>fustanes</i>), ready made, pure or mixed linen, plain, including weight of container. kilo..	2.50
486	463	Petticoats, or underskirts (<i>fustanes</i>), ready made, pure or mixed linen, trimmed or embroidered, including weight of container..... kilo..	4.00
487	464	Petticoats, or underskirts (<i>fustanes</i>), in patterns, pure or mixed linen, plain and without any trimmings, including weight of container..... kilo..	1.50
488	465	Petticoats, or underskirts (<i>fustanes</i>), in patterns, pure or mixed linen, trimmed or embroidered, including weight of container kilo..	2.50
489	504	Piqué, pure or mixed linen, white or colored, quilted or not quilted, including weight of container..... kilo..	1.50
490	389	Robes (<i>batas</i>), pure or mixed linen, trimmed or embroidered with the same material..... each..	8.00
491	390	Robes (<i>batas</i>), pure or mixed linen, trimmed with wool or silk each..	10.00
492	391	Robes (<i>batas</i>), pure or mixed linen, shaggy, for bathing, each.....	-----
493	513	Royal, pure or mixed linen, including weight of container kilo..	1.50
494	523	Royal cloth (<i>tela real</i>), pure or mixed linen, white or colored, including weight of container kilo..	2.00
495	514	Russian duck (<i>rusia</i>), pure or mixed linen, gross weight, kilo.....	.60
496	383	Sandals (<i>alpargatas</i>), pure or mixed linen, with soles of hemp or broom grass (<i>esparto</i>), including weight of container kilo..	1.00
497	424	Sashes, pure or mixed linen, with or without elastic, plain or embroidered, including weight of container, kilo.....	3.00
498	511	Shawls (<i>rebozos</i>), pure or mixed linen, up to 2.20 meters in length by 0.50 meter in width each..	2.00
499	515	Sheets (<i>sábanas</i>), or covers (<i>perrajes</i>), pure or mixed linen, white or colored, plain or shaggy, including weight of container kilo..	2.00
500	409	Shirts, pure or mixed linen, white or colored, plain, with or without collars and cuffs, for men or boys, including weight of container kilo..	4.00
501	410	Shirts, pure or mixed linen, white or colored, trimmed or embroidered, with or without collars and cuffs, for men or boys, including weight of container kilo..	8.00

SECTION FOURTH.—LINEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
502	502	Shirt bosoms, pure or mixed linen, plain or with tucks, dozen	3. 00
503	503	Shirt bosoms, pure or mixed linen, trimmed or embroi- dered, including weight of container..... kilo..	4. 50
504	476	Slips, layette, or sets of baby linen (<i>jaticos</i>), pure or mixed linen, plain, trimmed, or embroidered with the same material, including weight of container..... kilo..	10. 00
505	477	Slips, layette, or sets of baby linen (<i>jaticos</i>), pure or mixed linen, trimmed or embroidered with wool or silk, including weight of container..... kilo..	12. 00
506	434	Slippers in patterns, canvas, (<i>cañamazo</i>), pure or mixed linen, including weight of container..... kilo..	2. 00
507	399	Socks, pure or mixed linen, including weight of container, kilo.....	2. 00
508	491	Stockings, pure or mixed linen, including weight of container..... kilo..	3. 00
509	524	Suspenders, pure linen, or linen mixed with cotton, with or without appurtenances, or elastic, including weight of container..... kilo..	6. 00
510	487	Table cloths, damask (<i>damasco</i>), pure or mixed linen, including weight of container..... kilo..	2. 00
511	488	Table cloths, damask (<i>alemanisco</i>), pure or mixed linen, including weight of container..... kilo..	2. 00
512	421	Tape, pure or mixed linen or hemp, white or colored, including weight of container..... kilo..	1. 00
513	422	Tape, pure or mixed linen or hemp, white or colored, with clasps or endings of metal, including weight of container..... kilo..	2. 00
514	423	Tape, pure or mixed linen, or hemp, with elastic, up to 4 centimeters in width, including weight of container, kilo.....	2. 00
515	396	Tassels, pure or mixed linen, even if their interior frame (<i>alma</i>) is of any other material, including weight of container..... kilo..	3. 00
516	472	Thread, pure or mixed linen, white or colored, twisted, for sewing, in wooden or metallic spools, gross weight, kilo.....	1. 00
517	473	Thread, pure or mixed linen, white or colored, twisted, for sewing, embroidering, or crochet work, wound on pieces of pasteboard, or in balls or skeins, including weight of container..... kilo..	1. 50
518	474	Thread, pure or mixed linen, or hemp, ordinary, white or colored, for sewing shoes, bags, or other similar articles, including weight of container..... kilo..	. 50
519	385	Tidies (<i>anti macasares</i>), pure or mixed linen, plain or emb- roided, including weight of container..... kilo..	4. 50
520	496	Towels (<i>paños de mano</i>), pure or mixed linen, white or colored, plain or shaggy, including weight of container, kilo.....	1. 20

SECTION FOURTH.—LINEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemalan tariff.		
			Dollars.
521	527	Towels (<i>tohallas</i>), pure or mixed linen, white or colored, plain or shaggy, including weight of container... kilo..	1.20
522	376	Trimmings (<i>adornos</i>), pure linen, or linen mixed with cotton, including weight of container..... kilo..	3.50
523	377	Trimmings (<i>adornos</i>), linen mixed with silk or wool, including weight of container..... kilo..	6.00
524	507	Tulle, pure or mixed linen, plain, including weight of container..... kilo..	4.00
525	508	Tulle, pure or mixed linen, figured or embroidered wholly or in part, including weight of container..... kilo..	4.50
526	499	Umbrellas, pure or mixed linen..... each..	1.00
527	500	Umbrellas, small, pure or mixed linen..... each..	.80
528	411	Undershirts, pure or mixed linen, knit, including weight of container..... kilo..	2.50
529	415	Vests, ready made, any material of pure or mixed linen, each.....	2.50
530	435	Vests in patterns, pure or mixed linen, plain or embroidered, including weight of container..... kilo..	4.00
531	374	Wraps, linen lace, with or without linen trimmings, including weight of container..... kilo..	3.00
532	375	Wraps, lace of linen mixed with wool or silk, including weight of container..... kilo..	6.00
533	386	Wrapping or packing cloth (<i>arpillera</i>), or coarse duck (<i>brin ordinario</i>), pure or mixed linen, gross weight kilo..	.30

SECTION FIFTH.—WOOLEN ARTICLES.

534	614	Aprons, pure or mixed wool, with or without trimmings or embroiderings, including weight of container. kilo..	6.00
535	542	Baby-walkers, pure wool, or wool mixed with cotton, plain or embroidered, with or without appurtenances, including weight of container..... kilo..	8.00
536	549	Baize, pure wool, or wool mixed with cotton or any other vegetable fiber, including weight of container .. kilo..	1.00
537	550	Baize, heavy or coarse (<i>bayetón</i>), pure wool, or wool mixed with cotton or any other vegetable fiber, including weight of container..... kilo..	1.00
538	545	Belts, or sashes (<i>bandas</i>), pure wool, or wool mixed with cotton, or any other vegetable fiber, network or woven, including weight of container..... kilo..	5.00
539	546	Belts, or sashes (<i>bandas</i>), wool mixed with silk, network or woven, including weight of container..... kilo..	8.00
540	634	Blankets, pure or mixed wool, gross weight..... kilo..	.50
541	551	Blond lace, pure wool, or wool mixed with cotton or any other vegetable fiber, including weight of container, kilo.....	5.00

SECTION FIFTH.—WOOLEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
542	552	Blouses, pure wool, or wool mixed with cotton or any other vegetable fiber, for men or boys, including weight of container kilo..	5.00
543	553	Blouses, pure wool, or wool mixed with cotton or any other vegetable fiber, plain, trimmed, or embroidered with material of the same kind, for women or girls, including weight of container kilo..	7.00
544	554	Blouses, pure wool, or wool mixed with cotton or any other vegetable fiber, trimmed or embroidered with silk, for women or girls, including weight of container kilo..	10.00
545	714	Braid, pure wool, or wool mixed with cotton or any other vegetable fiber, plain or figured, including weight of container kilo..	2.00
546	650	Bunting, wool, mixed with cotton or any other vegetable fiber, including weight of container kilo..	1.25
547	651	Bunting, pure wool, without mixture of any kind, including weight of container kilo..	2.50
548	652	Bunting, pure wool, or wool mixed with cotton or any other vegetable fiber, containing silk, including weight of container kilo..	3.00
549	556	Buttons covered with any material of pure wool, or of wool mixed with cotton, or any other vegetable fiber, including weight of container kilo..	4.00
550	637	Caps, pure or mixed wool, woven or knit, plain, trimmed or embroidered with material of the same kind, with or without visors dozen..	10.00
551	638	Caps, pure or mixed wool, woven or knit, trimmed or embroidered with silk, or with material containing silk, with or without visors dozen..	12.00
552	539	Carpeting, pure wool, or wool mixed with cotton, or any other vegetable fiber, shaggy, figured, or plain, gross weight kilo..	.40
553	540	Carpets or rugs, ready made, of the same material and of the same classes as described in the preceding item, gross weight kilo..	.60
554	715	Carpeting (<i>tripe</i>), pure wool, or wool mixed with cotton, or any other vegetable fiber, plain or figured, including weight of container kilo..	3.00
555	581	Cassimere, or <i>casineta</i> , wool mixed with cotton or any other vegetable fiber, including weight of container, kilo.....	1.50
556	582	Cassimere, pure wool, including weight of container, kilo.....	3.00
557	564	Chemises, pure or mixed wool, plain and without any trimmings, for women or girls, including weight of container kilo..	4.00
558	565	Chemises, pure or mixed wool, trimmed, embroidered, for women or girls, including weight of container... kilo..	6.00
559	588	Cheviot, wool mixed with cotton or with any other vegetable fiber including weight of container. kilo..	1.50

SECTION FIFTH.—WOOLEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
560	589	Cheviot, pure wool, including weight of container .kilo..	3.00
561	571	Cloaks or capes (<i>capas</i> or <i>esclarinas</i>), broadcloth, with or without woolen or cotton linings each..	15.00
562	572	Cloaks or capes (<i>capas</i> or <i>esclarinas</i>), broadcloth, with silk or mixed silk linings each..	25.00
563	573	Cloaks or capes (<i>capas paletôes</i>), overcoats, or sacks, of any kind of woolen stuff, plain, trimmed, or embroid- ered, for ladies, including weight of container ... kilo..	8.00
564	675	Cloth or broadcloth (<i>pañño</i>), wool mixed with cotton or any other vegetable fiber, including weight of con- tainer kilo..	1.50
565	676	Cloth or broadcloth (<i>pañño</i>), pure wool, including weight of container, kilo.....	3.00
566	677	Cloth, ladies (<i>pañete</i>), wool mixed with cotton, or any other vegetable fiber, including weight of container, kilo.....	1.50
567	678	Cloth ladies (<i>pañete</i>), pure wool, including weight of con- tainer kilo..	3.00
568	579	Coats, uniforms (<i>casacas</i> or <i>levitas</i>), broadcloth or pure or mixed cassimere, without embroiderings, for military people each..	8.00
569	580	Coats, uniforms, (<i>casacas</i> or <i>levitas</i>), broadcloth or pure or mixed cassimere, with galloons or embroiderings of gold, silver, or imitation of either metal, for military people each..	20.00
570	610	Collars, pure or mixed wool, plain, trimmed, or embroid- ered, including weight of container kilo..	12.00
571	600	Cord or braid, (<i>cordón</i> or <i>trenza</i>), pure or mixed wool, even if the interior frame (<i>alma</i>) is made of different material, including weight of container kilo..	4.00
572	672	Corduroy (<i>pana</i>), pure or mixed wool, white or colored, plain or figured, including weight of container ... kilo..	3.00
573	601	Corsets, pure or mixed wool, with or without trimmings, including weight of container kilo..	6.00
574	597	Counterpanes, crochet or net work, pure or mixed wool, covered or not covered, including weight of con- tainer kilo..	8.00
575	574	Covers, table or other (<i>carpetas</i>), pure or mixed wool, plain or shaggy, without fringe of a different material, including weight of container kilo..	2.00
576	575	Covers, table or other (<i>carpetas</i>), pure or mixed wool, with trimmings or embroiderings, not made with silk or with material containing silk, including weight of container kilo..	4.00
577	576	Covers, table or other (<i>carpetas</i>), pure or mixed wool material, with trimmings or embroiderings made with silk, or with material containing silk, including weight of container kilo..	6.00

SECTION FIFTH.—WOOLEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
578	577	Covers, table or other (<i>carpetas</i>), crochet or net work, pure or mixed wool, covered or not covered, with or without fringe of the same material, including weight of container kilo..	6.00
579	578	Covers, table or other (<i>carpetas</i>), crochet or net work, pure or mixed wool, with cover and fringe of silk, or of material containing silk, including weight of container kilo..	8.00
580	629	Covers (<i>forros</i>) for umbrellas, parasols, or shades, sewed together or in pieces, pure or mixed wool, including weight of container..... kilo..	2.00
581	609	Crape, pure or mixed wool, plain or embroidered, including weight of container..... kilo..	6.00
582	598	Cravats, or neckties, pure or mixed wool, plain and without any trimming, including weight of container. kilo..	4.00
583	599	Cravats, or neckties, pure or mixed wool, with trimmings or embroiderings made with silk, or with material containing silk, including weight of container kilo..	6.00
584	607	Curtains, or drapery (<i>cortinas</i> or <i>sobrecortinas</i>), pure or mixed wool, plain, trimmed, or embroidered, with or without fringe of the same material, including weight of container kilo..	6.00
585	608	Curtains, or drapery (<i>cortinas</i> or <i>sobrecortinas</i>), pure or mixed wool, with trimmings, embroiderings, or fringe of silk, or of some material containing silk, including weight of container..... kilo..	10.00
586	541	Cushions, covered with any material of pure or mixed wool, plain, trimmed, or embroidered, with or without fillings, including weight of container..... kilo..	8.00
587	611	Damask, wool mixed with cotton or any other vegetable fiber, including weight of container..... kilo..	1.50
588	612	Damask, pure wool, including weight of container. kilo..	2.25
589	613	Damask, pure or mixed wool, interwoven with silk or with material containing silk, including weight of container kilo..	6.00
590	560	Drawers, pure or mixed wool, knit, including weight of container kilo..	2.00
591	561	Drawers, pure or mixed wool, including weight of container kilo..	3.00
592	562	Drawers, or pantalets, pure or mixed wool, plain, and without any trimmings, for women or girls, including weight of container..... kilo..	3.00
593	563	Drawers, or pantalets, pure or mixed wool, with trimmings or embroiderings, including weight of container... kilo..	4.50
594	633	Dress coats (<i>fraques</i>), any material of pure or mixed wool, with or without silk linings each..	15.00

SECTION FIFTH.—WOOLEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemalan tariff.		
			Dollars.
595	711	Dresses, or suits, ready made, any goods of pure wool or of wool mixed with cotton or any other vegetable fiber, not specified, and the parts thereof when sewed together, of all classes and fabrics, even if having trimmings, or linen lace, or embroidered strips of cotton or linen, or silk ribbons, or ornaments of ordinary metal, for adults, and children over 8 years of age, including weight of container kilo..	10.00
596	712	Dresses, or suits, ready made, any goods of pure wool, or of wool mixed with cotton or any other vegetable fiber, not specified, and the parts thereof, when sewed together, trimmed with silk material, or with material containing silk, for adults or children over 8 years of age, including weight of container kilo..	12.00
597	713	Dresses, or suits, ready made, any goods of pure wool or of wool mixed with cotton or any other vegetable fiber, not specified, and the parts thereof when sewed together, having skirts or overskirts of cotton or linen lace, for adults or children over 8 years of age, including weight of container kilo..	12.00
598	716	Dresses or suits, ready made, any goods of pure wool, or of wool mixed with cotton or any other vegetable fiber, of all classes and patterns, with or without trimmings of silk or wool, for children under 8 years of age, including weight of container kilo..	6.00
599	604	Dress patterns, any goods of pure or mixed wool, such as muslin, bunting, merino, alpaca, and other similar, plain and without any trimmings, for ladies, including weight of container kilo..	3.00
600	605	Dress patterns, any goods of pure or mixed wool, such as muslin, bunting, merino, alpaca, and others similar, trimmed with material of the same kind, for ladies, including weight of container kilo..	4.00
601	606	Dress patterns, any goods of pure or mixed wool, such as muslin, bunting, merino, alpaca, and others similar, trimmed with silk, or with material containing silk, for ladies, including weight of container kilo..	6.00
602	621	Edgings (<i>espiguilla</i>), pure wool, or wool mixed with cotton or any other vegetable fiber, including weight of container kilo..	4.00
603	641	Edgings (<i>guardas</i>), wool mixed with cotton or any other vegetable fiber, including weight of container .. kilo..	4.00
604	642	Edgings (<i>guardas</i>), pure wool, or wool mixed with silk, or embroidered with silk, including weight of container kilo..	8.00
605	690	Embroidery (<i>randas</i>), pure wool, or wool mixed with cotton or any other vegetable fiber, including weight of container kilo..	4.00

SECTION FIFTH.—WOOLEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemalan tariff.		
			<i>Dollars</i>
606	691	Embroidery (<i>randas</i>), pure wool, or wool mixed with cotton or any other vegetable fiber, containing silk, including weight of container..... kilo..	8.00
607	709	Embroidery or embroidered strips, or insertions (<i>tiras bordadas</i>), pure wool, or wool mixed with cotton or any other vegetable fiber, the embroidery being made with the same material, including weight of container..... kilo..	4.00
608	710	Embroidery, or embroidered strips, or insertions (<i>tiras bordadas</i>), pure wool, or wool mixed with cotton or any other vegetable fiber, the embroidering being made with silk, or the strips themselves containing silk, including weight of container..... kilo..	8.00
609	706	Fabrics (<i>tejidos</i>), pure or mixed wool, not specified, including weight of container..... kilo..	4.00
610	625	Filele (<i>filaila</i>), or alpaca, wool mixed with cotton or any other vegetable fiber, including weight of container, kilo.....	1.25
611	626	Filele (<i>filaila</i>), or alpaca, pure wool, including weight of container..... kilo.....	2.50
612	631	Flannel, wool mixed with cotton or any other vegetable fiber, including weight of container..... kilo..	1.50
613	632	Flannel, pure wool, including weight of container..... kilo..	3.00
614	646	Frieze (<i>jerga</i>), wool mixed with cotton or any other vegetable fiber, imitation of the Guatemalan article, including weight of container..... kilo..	1.50
615	647	Frieze (<i>jerga</i>), pure wool, imitation of the Guatemalan article, including weight of container..... kilo..	3.00
616	627	Fringe (<i>flecos</i>), pure or mixed wool, including weight of container..... kilo..	4.00
617	628	Fringe (<i>flecos</i>), pure or mixed wool containing silk, including weight of container..... kilo.....	8.00
618	656	Frock coats, any material of pure or mixed wool..... each..	10.00
619	683	Gaiters or leggings (<i>polainas</i>), pure or mixed wool, with or without appurtenances, including weight of container..... kilo.....	2.50
620	636	Galloon, pure or mixed wool, including weight of container..... kilo.....	4.00
621	657	Garters, pure or mixed wool, with or without elastic, including weight of container..... kilo.....	4.00
622	590	Girths, saddle, pure or mixed wool, including weight of container..... kilo.....	3.00
623	640	Gloves, pure or mixed wool, knit, including weight of container..... kilo.....	6.00
624	639	<i>Grano de oro</i> stuff, pure or mixed wool, including weight of container..... kilo.....	1.00
625	702	Hats, felt, vicugna, and the imitations thereof, all sizes, and shapes, including weight of container..... kilo.....	3.00

SECTION FIFTH.—WOOLEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemalan tariff.		
			<i>Dollars.</i>
626	703	Hats, opera and others, high crown, cylindrical, all sizes with woolen linings..... each..	1.50
627	595	Headdresses, or caps (<i>coffias</i>), pure or mixed wool, plain, trimmed or embroidered with material of the same kind dozen.....	10.00
628	596	Headdresses, or caps (<i>coffias</i>), pure or mixed wool, trimmed or embroidered with silk, or with material containing silk..... dozen..	12.00
629	663	Horse blankets (<i>mantillones</i>), pure or mixed wool, with or without trimmings or embroiderings, including weight of container..... kilo..	1.00
630	616	Insertions (<i>embutidos</i>), pure wool, or wool mixed with cotton or any other vegetable fiber, including weight of container..... kilo..	4.00
631	617	Insertions (<i>embutidos</i>), pure wool, or wool mixed with silk or embroidered with silk, including weight of container..... kilo..	8.00
632	584	Jackets or sacks, pure or mixed wool, for men..... each..	8.00
633	585	Jackets or sacks, pure or mixed wool, plain and without any trimmings, for women..... each..	5.00
634	586	Jackets or sacks, pure or mixed wool, trimmed or embroidered with material of the same kind, for women, each.....	8.00
635	587	Jackets or sacks, pure or mixed wool, with trimmings or embroiderings of silk or of material containing silk, for women..... each..	12.00
636	648	Jerseys, pure or mixed wool, knit, plain, trimmed, or embroidered, including weight of container..... kilo..	6.00
637	619	Lace, pure or mixed wool, including weight of container..... kilo..	6.00
638	615	Lastings (<i>duradera</i>), pure or mixed wool, including weight of container..... kilo..	1.00
639	654	Lasting (<i>lastin</i>), wool mixed with cotton, or with any other vegetable fiber, including weight of container, kilo.....	1.00
640	655	Lasting (<i>lastin</i>), pure wool, including weight of container..... kilo..	2.00
641	653	Lasticotina, pure or mixed wool, including weight of container..... kilo..	3.00
642	630	Linings (<i>forros</i>), any material of pure or mixed wool, for hats, including weight of container..... kilo..	4.00
643	534	Loops, mixed with cotton or any other vegetable fiber, with their tassels and cords, even if the interior frame (<i>alma</i>) is of another material, including weight of container..... kilo..	4.00
644	661	Mantelets, or mantillas, pure wool, or wool mixed with cotton or any other vegetable fiber, the largest part thereof being trimmed or embroidered with beads or bugles, glass, metal, or paste, including weight of container..... kilo..	3.00

SECTION FIFTH.—WOOLEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
645	662	Mantelets, or mantillas, pure wool, or wool mixed with cotton or with any other vegetable fiber, including weight of container.....kilo..	6.00
646	664	Manufactures of worsted, or pure or mixed wool, woven or knit, not specified, including weight of container, kilo	2.00
647	666	Merino, wool mixed with cotton or any other vegetable fiber, including weight of container.....kilo..	1.25
648	667	Merino, pure wool, including weight of container.....kilo..	2.50
649	668	Merino, pure or mixed wool, containing silk, including weight of container.....kilo..	3.00
650	669	Muslin, wool mixed with cotton or any other vegetable fiber, including weight of container.....kilo..	1.25
651	670	Muslin, pure wool, including weight of container, kilo..	2.50
652	671	Muslin, pure or mixed wool, containing silk, including weight of container.....kilo..	4.00
653	658	Netting (<i>mallas</i>), pure wool, or wool mixed with cotton or any other vegetable fiber, including weight of container.....kilo..	4.00
654	659	Netting (<i>mallas</i>), pure wool, or wool mixed with cotton or any other vegetable fiber, containing silk, including weight of container.....kilo..	8.00
655	701	Overcoats (<i>sobretodos</i> , <i>paletós</i> , or <i>gabanes</i>), any material of pure or mixed wool, plain, trimmed, or embroidered, including weight of container.....kilo..	8.00
656	673	Pants, any material of pure or mixed wool.....each..	6.00
657	674	Pants, any material of pure or mixed wool, with galloon or embroiderings, for military people.....each..	8.00
658	704	Parasols or shades (<i>sombrillas</i>), pure or mixed wool, with trimmings or embroiderings of the same material, each..	1.50
659	705	Parasols or shades (<i>sombrillas</i>), pure or mixed wool, with trimmings or embroiderings of silk or of material containing silk.....each..	2.00
660	618	Petticoats or underskirts (<i>enaguas interiores</i>), any material of pure or mixed wool, whether woven or knit, including weight of container.....kilo..	2.50
661	635	Petticoats or underskirts (<i>fustanes</i> , or <i>enaguas interiores</i>), any material of pure or mixed wool, including weight of container.....kilo..	2.50
662	687	Piqué, wool mixed with cotton or any other vegetable fiber, including weight of container.....kilo..	1.25
663	688	Piqué, pure wool, including weight of container...do...	2.50
664	689	Piqué, pure or mixed wool, containing silk, including weight of container.....kilo..	4.00
665	624	Plush (<i>felpa</i> or <i>felpilla</i>), pure or mixed wool, including weight of container.....kilo..	4.00
666	684	Ponchos, shawls (<i>sarapes</i>), and plaids, pure or mixed wool, including weight of container.....kilo..	3.00

SECTION FIFTH.—WOOLEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
667	685	Poplin, pure wool, or wool mixed with cotton or any other vegetable fiber, including weight of container, kilo.....	4.00
668	686	Poplin, pure wool, or wool mixed with cotton or any other vegetable fiber, containing silk, including weight of container.....kilo..	6.00
669	694	Reps, or corded woollen cloth, wool mixed with cotton or any other vegetable fiber, including weight of container.....kilo..	1.50
670	695	Reps, or corded woollen cloth, pure wool, including weight of container.....kilo..	2.25
671	696	Reps, or corded woollen cloth, pure or mixed wool, with silk work, or work containing silk, including weight of container.....kilo..	6.00
672	547	Robes (<i>batas</i>), any material of pure wool or of wool mixed with cotton or any other vegetable fiber, plain, trimmed, or embroidered with material of the same kind.....each..	10.00
673	548	Robes (<i>batas</i>), any material of pure wool or of wool mixed with cotton or any other vegetable fiber, trimmed or embroidered with silk.....each..	12.00
674	697	Sacks (<i>sacos</i> or <i>chaquetones</i>), pure or mixed wool, knit, including weight of container.....kilo..	4.00
675	593	Sashes, pure or mixed wool, with trimmings or embroiderings of silk, or of material containing silk, including weight of container.....kilo..	4.00
676	594	Sashes, pure or mixed wool, with or without elastic, plain, or embroidered with material of the same kind, including weight of container.....kilo..	3.00
677	557	Scarfs (<i>bufandas</i>), pure wool or wool mixed with cotton, or any other vegetable fiber, woven or knit, including weight of container.....kilo..	5.00
678	558	Scarfs (<i>bufandas</i>), pure wool or wool mixed with cotton or any other vegetable fiber, woven or knit, with silk trimmings, embroiderings, or fringe, including weight of container.....kilo..	8.00
679	698	Serge (<i>sarga</i> or <i>sarguilla</i>), wool mixed with cotton, or any other vegetable fiber, including weight of container.....kilo..	1.00
680	699	Serge (<i>sarga</i> or <i>sarguilla</i>), pure wool, including weight of container.....kilo..	2.00
681	700	Serge (<i>sarga</i> or <i>sarguilla</i>), pure or mixed wool containing silk, including weight of container.....kilo..	4.00
682	660	Shawls, or rugs, travelers' (<i>mantas de tripe</i>), shaggy, pure or mixed wool.....each..	4.00
683	679	Shawls (<i>pañolones</i>), cashmere, pure wool, worsted or merino, or wool, worsted, or merino mixed with cotton or any other vegetable fiber, including weight of container.....kilo..	2.00

SECTION FIFTH.—WOOLEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala tariff.		
			<i>Dollars.</i>
684	680	Shawls (<i>pañolones</i>) pure or mixed woolen cloth, with silk borders, embroideries, or fringe, including weight of container.....kilo..	6.00
685	692	Shawls (<i>rebozos</i>), any material of pure wool, or of wool mixed with cotton or any other vegetable fiber, including weight of container.....kilo..	2.00
686	693	Shawls (<i>rebozos</i>), any material of pure wool, or of wool mixed with cotton, or any other vegetable fiber, with silk borders, embroiderings, or fringe, including weight of container.....kilo..	4.00
687	566	Shirts, pure or mixed wool, woven, or knit, white or colored, plain and without any trimming, with or without collar and cuffs, for men or boys, including weight of container.....kilo..	2.00
688	567	Shirts, pure or mixed wool, woven or knit, white or colored, with trimmings or embroiderings, with or without collar and cuffs, for men or boys, including weight of container.....kilo..	2.50
689	568	Shirts, any material of wool mixed with silk, woven, with or without collar and cuffs and cords or strings, for men and boys, including weight of container....kilo..	6.00
690	622	Slips, long (<i>faldones</i>), any material of pure or mixed wool, plain, trimmed, or embroidered, for infants, including weight of container.....kilo..	8.00
691	623	Slips, long (<i>faldones</i>), any material of pure or mixed wool, trimmed or embroidered with pure or mixed silk, for infants, including weight of container.....kilo..	12.00
692	644	Slips, layette, or sets of baby linen (<i>jaticos</i>), pure or mixed wool, plain, trimmed, or embroidered with material of same kind, even if some articles in the set are cotton or linen, including weight of container...kilo..	7.00
693	645	Slips, layette, or sets of baby linen (<i>jaticos</i>), pure or mixed wool, trimmed or embroidered with silk, even if some articles in the set are cotton, or linen, including weight of container.....kilo..	10.00
694	602	Slippers in patterns, pure or mixed wool, including weight of container.....kilo..	4.00
695	620	Socks, babies', pure or mixed wool, knit, with or without soles, including weight of container.....kilo..	4.00
696	559	Socks, pure or mixed wool, knit, including weight of container.....kilo..	2.00
697	665	Stockings, pure or mixed wool, including weight of container.....kilo..	2.00
698	708	Suspenders, pure wool, or wool mixed with cotton or any other vegetable fiber, plain, or figured, with or without appurtenances, including weight of container....kilo..	8.00
699	591	Tape, or ribbons (<i>cintas</i>), pure or mixed wool, white or colored, including weight of container.....kilo..	2.00

SECTION FIFTH.—WOOLEN ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
700	592	Tape, or ribbons (<i>cintas</i>), pure or mixed wool, with elastic, up to 4 centimeters in width, including weight of container.....kilo..	3.00
701	555	Tassels, pure wool, or wool mixed with cotton or any other vegetable fiber, even if the interior frame (<i>alma</i>) is of another material, including weight of container..kilo..	4.00
702	643	Thread, woolen, for knitting or embroidering, including weight of container.....kilo..	0.50
703	543	Tidies (<i>antimacasares</i>), pure wool, or wool mixed with cotton or any other vegetable fiber, woven or knit, plain or embroidered with material of the same kind, including weight of container.....kilo..	4.00
704	544	Tidies (<i>antimacasares</i>), pure wool, or wool mixed with silk, woven or knit, trimmed or embroidered with silk, including weight of container.....kilo..	8.00
705	537	Trimmings (<i>adornos</i>), of cloth of pure wool, or of wool mixed with cotton or any other vegetable fiber, including weight of container.....kilo..	4.00
706	538	Trimmings (<i>adornos</i>), of cloth of pure wool, or wool mixed with silk, including weight of container..kilo..	8.00
707	681	Umbrellas, any material of pure wool, or wool mixed with cotton or any other vegetable fiber.....each..	1.00
708	682	Umbrellas, small, (<i>paraguitos</i>), any material of pure wool, or wool mixed with cotton or any other vegetable fiber, each.....	0.80
709	569	Undershirts, pure or mixed wool, knit, including weight of container.....kilo..	2.00
710	570	Undershirts, pure or mixed wool, with or without sleeves, including weight of container.....kilo..	3.00
711	707	Velvet, pure wool, or wool mixed with cotton or any other vegetable fiber, plain or figured, including weight of container.....kilo..	4.00
712	583	Vests, ready-made, any goods of pure or mixed wool, each.....	3.00
713	603	Vests, in patterns, any goods of pure or mixed wool, trimmed or figured with material of the same kind, including weight of container.....kilo..	4.00
714	649	Wool, in the fleece or carded, gross weight.....kilo..	0.20
715	535	Wraps (<i>abrigos</i>), lace, pure wool, or wool mixed with cotton or any other vegetable fiber, including weight of container.....kilo..	5.00
716	536	Wraps (<i>abrigos</i>), lace, pure wool, or wool mixed with silk, including weight of container, kilo.....	8.00

SECTION SIXTH.—SILK ARTICLES.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
717	771	Aprons, any goods of pure or mixed silk, with or without trimmings or embroiderings, including weight of container.....kilo..	16.00
718	722	Articles, silk mixed with cotton, linen, or wool, knit, not specified, including weight of container.....kilo..	8.00
719	723	Articles, pure silk, not specified, including weight of container.....kilo..	16.00
720	724	Articles, silk mixed with cotton, linen, or wool, with or without embroiderings of the same materials, not specified, including weight of container.....kilo..	10.00
721	725	Articles, silk mixed with cotton, linen, or wool, the largest part thereof being trimmed with beads or bugles, glass, metal, or paste, not specified, including weight of container.....kilo..	8.00
722	726	Belts or sashes (<i>bandas</i>), pure or mixed silk burate, plain or damasked, including weight of container.....kilo..	8.00
723	727	Belts or sashes (<i>bandas</i>), pure or mixed silk, network, including weight of container.....kilo..	12.00
724	729	Blond lace, pure or mixed silk, including weight of container.....kilo..	20.00
725	730	Blouses, any material of pure or mixed silk, plain, trimmed, or embroidered.....each..	5.00
726	731	Boas, silk mixed with cotton, linen, or wool, including weight of container.....kilo..	8.00
727	732	Boas, pure silk, including weight of container.....kilo..	16.00
728	837	Braid, pure or mixed silk, including weight of container.....kilo..	5.00
729	735	Brocade (<i>brocato</i>), pure or mixed silk, including weight of container.....kilo..	12.00
730	736	Burate, mixed silk, including weight of container.....kilo..	6.00
731	737	Burate, pure silk, including weight of container.....kilo..	12.00
732	734	Buttons, made out of, or covered with, silk, or material containing silk, including weight of container.....kilo..	10.00
733	742	Capes, wraps, or opera cloaks, any material of pure or mixed silk, plain, trimmed or embroidered, for ladies, each.....	15.00
734	790	Caps (<i>gorros</i> or <i>birretes</i>), pure or mixed silk, plain, trimmed, or embroidered, with or without visors.....dozen..	15.00
735	740	Chemises, any material of pure or mixed silk, plain, trimmed, or embroidered, including weight of container.....kilo..	20.00
736	753	Clarín (sieve cloth), pure or mixed silk, for sieves, including weight of container.....kilo..	12.00
737	768	Collars, pure or mixed silk, plain, trimmed or embroidered, including weight of container.....kilo..	16.00
738	758	Cord, or braid, pure or mixed silk, even if the interior frame is of another material, including weight of container.....kilo..	5.00
739	759	Corsets, any material of pure or mixed silk, with or without trimmings, including weight of container....kilo..	6.00

SECTION SIXTH.—SILK ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
740	755	Counterpanes (<i>sobrecamas</i> , or <i>colchas</i>), pure or mixed silk, network, with or without lining or covers, plain, trimmed, or embroidered, including weight of container.....kilo..	12.00
741	756	Counterpanes (<i>sobrecamas</i> , or <i>colchas</i>), lined or covered with silk material, or with material containing silk, padded with cotton, including weight of container, kilo.....	5.00
742	744	Covers, table (<i>carpetas</i>), any material of pure or mixed silk, plain, trimmed, or embroidered, including weight of container.....kilo..	12.00
743	782	Covers (<i>forros</i>), for umbrellas, parasols, or shades, sewed together or in pieces, pure or mixed silk, including weight of container.....kilo..	8.00
744	767	Crape, pure or mixed silk, including weight of container.....kilo..	20.00
745	757	Cravats, or neckties, pure or mixed silk, with or without interior frame of any other material, including weight of container.....kilo..	8.00
746	766	Curtains, or draperies (<i>cortinas</i> or <i>sobrecortinas</i>), any material of pure or mixed silk, plain, trimmed, or embroidered, including weight of container.....kilo..	16.00
747	721	Cushions, covered with any material of pure or mixed silk, plain, trimmed, or embroidered, with or without fillings, including weight of container.....kilo..	12.00
748	769	Damask, pure or mixed silk, plain, trimmed, or embroidered, including weight of container.....kilo..	8.00
749	770	Damask, pure or mixed silk, interwoven or embroidered with threads of false or fine metal, including weight of container.....kilo..	6.00
750	739	Drawers, pure or mixed silk, knit, including weight of container.....kilo..	20.00
751	836	Dresses or suits, ready made, any material of pure or mixed silk, plain, trimmed, or embroidered, and the parts thereof when sewed together, including weight of container.....kilo..	10.00
752	838	Dresses or suits, pure or mixed silk, with or without trimmings or embroiderings, for children under 8 years of age, including weight of container.....kilo..	12.00
753	762	Dress patterns, any material of mixed silk, as grosgrain, moiré, taffeta, ottoman, surah, and others, plain and without any trimmings, for ladies, including weight of container.....kilo..	10.00
754	763	Dress patterns, any material of mixed silk, as in the foregoing item, trimmed or embroidered, including weight of container.....kilo..	12.00
755	764	Dress patterns, any material of pure silk, as grosgrain, moire, satin, taffeta, ottoman, surah, and others, trimmed or embroidered with pure or mixed silk, for ladies, including weight of container.....kilo..	18.00

SECTION SIXTH.—SILK ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
756	765	Dress patterns, crape, muslin, nun's veil (<i>velillo</i>) or other similar silk material, plain, trimmed or embroidered, including weight of container kilo..	25.00
757	777	Edgings (<i>espiguilla</i>), pure or mixed silk, including weight of container kilo..	16.00
758	778	Edgings (<i>espiguilla</i>), pure or mixed silk, the greatest part thereof being trimmed with beads or bugles, glass, metal, or paste, including weight of container kilo..	8.00
759	794	Edgings (<i>guarda</i>) pure or mixed silk, including weight of container kilo..	16.00
760	821	Embroidery (<i>randas</i>), pure or mixed silk, including weight of container kilo..	16.00
761	832	Embroidery, or embroidered strips (<i>tiras bordadas</i>), pure or mixed silk, including weight of container kilo..	16.00
762	833	Embroidery, or embroidered strips (<i>tiras bordadas</i>), pure or mixed silk, the greatest part thereof containing beads, or bugles, glass, metal, or paste, including weight of container kilo..	8.00
763	829	Fabrics, pure or mixed silk, not specified, including weight of container kilo..	25.00
764	780	Felt (<i>felpa</i> or <i>felpilla</i>), pure or mixed silk, including weight of container kilo..	8.00
765	810	Fichus, pure or mixed silk, including weight of container kilo..	16.00
766	781	Fringe (<i>flecós</i>), pure or mixed silk, including weight of container kilo..	16.00
767	785	Fringe (<i>franjas</i>), mixed silk, including weight of container kilo..	8.00
768	786	Fringe (<i>franjas</i>), pure silk, including weight of container kilo..	16.00
769	787	Galloon, pure or mixed silk, including weight of container kilo..	16.00
770	788	Galloon, pure or mixed silk, the greatest portion thereof containing beads, or bugles, glass, metal, or paste, including weight of container kilo..	8.00
771	800	Garters, pure or mixed silk, plain, embroidered, trimmed, or interwoven with other material, with or without elastic, including weight of container kilo..	8.00
772	789	Gauze, lawn (<i>linón</i>), or grenadine, pure or mixed silk, plain, percale like, figured, or embroidered, including weight of container kilo..	30.00
773	793	Gloves, pure or mixed silk, knit, with or without trimmings, including weight of container kilo..	20.00
774	791	Grosgran, or grosgrain silk (<i>gró</i>), moire, satin, taffeta, serge, ottoman, surah, and other goods of mixed silk, including weight of container kilo..	8.00
775	792	Groggran, or grosgrain (<i>gró</i>), moire, taffeta, serge, ottoman, surah, and other goods of pure silk, including weight of container kilo..	16.00

SECTION SIXTH.—SILK ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
776	814	Handkerchiefs, silk mixed with cotton, wool, or linen, including weight of container.....kilo..	5.00
777	815	Handkerchiefs, pure silk, including weight of container, kilo.....	10.00
778	816	Handkerchiefs, tulle, pure or mixed silk, with or without trimmings, including weight of container.....kilo..	20.00
779	826	Hats, high crown, cylindrical, all sizes, covered with plush or satin of pure or mixed silk, with or without springs.....each.....	2.00
780	827	Hats, felt, of all classes and sizes, not specified, including weight of container.....kilo..	4.00
781	754	Head dresses, or caps (<i>cofias</i>), pure or mixed silk, plain, trimmed or embroidered.....dozen.....	15.00
782	772	Insertions (<i>embutidos</i>), pure or mixed silk, including weight of container.....kilo..	16.00
783	773	Insertions, pure or mixed silk, the greatest portion thereof containing beads, or bugles, glass, metal, or paste, including weight of container.....kilo..	8.00
784	747	Jackets, any goods of pure or mixed silk, plain, trimmed, or embroidered, including weight of container.....kilo..	25.00
785	797	Jerseys, or Jersey jackets, pure or mixed silk, knit, plain, trimmed, or embroidered, including weight of container.....kilo..	20.00
786	775	Lace, pure or mixed silk, including weight of container.....kilo..	20.00
787	798	Lama, pure or mixed silk, including weight of container.....kilo..	10.00
788	799	Lama, pure or mixed silk, embroidered or interwoven with threads of false or fine metal, including weight of container.....kilo..	8.00
789	783	Linings (<i>forros</i>), any material of pure or mixed silk, for hats, including weight of container.....kilo..	12.00
790	784	Linings (<i>forros</i>), any material of pure or mixed silk, sewed together, or in the pattern, for capes or cloaks, including weight of container.....kilo..	16.00
791	717	Loops, curtain, pure or mixed silk, with their tassels and cords, even if their interior frame (<i>alma</i>) is of some other material, including weight of container.....kilo..	10.00
792	802	Mantillas or mantelets, pure or mixed silk lace, with trimmings or embroiderings, including weight of container.....kilo..	16.00
793	803	Mantillas or mantelets, pure or mixed silk lace, with trimmings or embroidering, the greatest portion thereof having beads or bugles, glass, metal, or paste, including weight of container.....kilo..	8.00
794	804	Manufactures of pure or mixed silk, not specified, including weight of container.....kilo..	16.00
795	743	Masks, pure or mixed silk, including weight of container, kilo.....	16.00
796	806	Muslin, pure or mixed silk, plain, figured, or embroidered, including weight of container.....kilo..	30.00

SECTION SIXTH.—SILK ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
797	801	Netting (<i>mallas</i>), pure or mixed silk, knit, including weight of container.....kilo..	20.00
798	828	Parasols, or shades (<i>sombrillas</i>), any material of pure or mixed silk, trimmed or embroidered.....each..	2.00
799	774	Petticoats, or underskirts (<i>enaguas interiores</i> , or <i>fustanes</i>), any material of pure or mixed silk, plain, trimmed, or embroidered, including weight of container.....kilo..	12.00
800	819	Piqué, pure or mixed silk, quilted or not quilted, including weight of container.....kilo..	16.00
801	822	Reps, or corded goods, pure or mixed silk, including weight of container.....kilo..	8.00
802	748	Ribbons, silk mixed with cotton or any vegetable fiber, including weight of container.....kilo..	6.00
803	749	Ribbons, pure or mixed silk, with elastic, up to four centimeters in width, including weight of container.kilo..	5.00
804	750	Ribbons, pure silk, including weight of container.kilo..	12.00
805	751	Ribbons, pure or mixed silk, white or colored, with metal clasps or eyelets, including weight of container.kilo..	5.00
806	728	Robes (<i>batas</i>), all kinds, pure or mixed silk, plain, trimmed, or embroidered.....each..	20.00
807	823	Sacks (<i>sacos</i>), all kinds, pure or mixed silk, for men or boys, including weight of container.....kilo..	16.00
808	752	Sashes, pure or mixed silk, with or without elastic, plain, trimmed or embroidered, including weight of container.....kilo..	12.00
809	746	Shawls (<i>chales</i> or <i>reberos</i>), pure or mixed silk, plain, figured, trimmed, or embroidered, including weight of container.....kilo..	12.00
810	811	Shawls (<i>pañolones</i>), silk mixed with cotton, linen, or wool, including weight of the paper inside.....kilo..	6.00
811	812	Shawls (<i>pañolones</i>), silk burate, crape-like, plain or embroidered, including weight of the paper inside.kilo..	12.00
812	813	Shawls (<i>pañolones</i>), any material of pure silk, including weight of paper inside.....kilo..	14.00
813	824	Silk, floss, all colors, including weight of container.kilo..	4.00
814	825	Silk, twist, to sew, embroider, or knit, all colors, including weight of container.....kilo..	5.00
815	799	Slips, long (<i>faldones</i>), any material of pure or mixed silk, plain, trimmed, or embroidered, for infants, including weight of container.....kilo..	16.00
816	796	Slips, layette, or sets of baby linen (<i>jaticos</i>), any material of pure or mixed silk, plain, trimmed, or embroidered, even if some articles in the set are of some other material, including weight of container.kilo..	16.00
817	761	Slippers, in patterns, pure or mixed silk, drawn, or cut off, including weight of container.....kilo..	8.00
818	738	Socks, pure or mixed silk, knit, including weight of container.....kilo..	20.00
819	776	Socks, babies', pure or mixed silk, knit, with or without soles, including weight of container.....kilo..	10.00

SECTION SIXTH.—SILK ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
820	805	Stockings, pure or mixed silk, including weight of container .....kilo..	20.00
821	831	Suspenders, pure or mixed silk, with or without appurtenances, including weight of container.....kilo..	12.00
822	733	Tassels, pure or mixed silk, even if their interior frame (<i>alma</i>) is of any other material, including weight of container.....kilo..	10.00
823	795	Thread, twist, pure or mixed silk, in wooden, metal, or pasteboard reels or spools, for sewing, including weight of container .....kilo..	5.00
824	834	Tissue, pure or mixed silk, including weight of container .....kilo..	12.00
825	835	Tissue, pure or mixed silk, the greatest part thereof containing threads of false or fine metal, including weight of container .....kilo..	10.00
826	719	Trimmings (<i>adornos</i>), pure or mixed silk, even if their interior frame is made out of some other material, including weight of container.....kilo..	10.00
827	720	Trimmings (<i>adornos</i>), pure or mixed silk, even if their interior frame is made of some other material, the greatest parts thereof containing beads, or bugles, glass, metal, or paste, including weight of container, kilo	5.00
828	820	Tulle, pure or mixed silk, plain, figured, or embroidered, including weight of container.....kilo..	30.00
829	817	Umbrellas, any material of pure or mixed silk.....each..	1.25
830	818	Umbrellas, small (<i>paraguillos</i>), any material of pure or mixed silk, plain and without any trimmings.....each..	1.00
831	741	Undershirts, pure or mixed silk, knit, including weight of container .....kilo..	20.00
832	839	Veils, tulle, pure or mixed silk, with or without trimmings or embroiderings, including weight of container, kilo	25.00
833	830	Velvet, pure or mixed silk, plain or figured, including weight of container.....kilo..	16.00
834	745	Vests, any goods of pure or mixed silk.....each..	6.00
835	760	Vest patterns, any goods of pure or mixed silk, plain, embroidered or interwoven, including weight of container.....kilo..	12.00
836	807	Vestments, priestly (<i>ornamentos sacerdotales</i>), and dresses for images, any material of silk mixed with wool, cotton, or linen, even if having embroiderings, or galloons made out of metal, not gold or silver, including weight of container.....kilo..	5.00
837	808	Vestments, priestly (<i>ornamentos sacerdotales</i>), and dresses for images, any material of silk mixed with wool, cotton, or linen, with embroiderings or galloons of silver, or gilded silver, including weight of container...kilo..	10.00

SECTION SIXTH.—SILK ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan. tariff.		
838	809	Vestments, priestly (<i>ornamentos sacerdotales</i>), or dresses for images, pure silk material, even if having embroiderings or galloons of silver, or gilded silver, including weight of container	<i>Dollars.</i> 20.00
839	718	Wraps (<i>abrigos</i>), lace, or any material of pure or mixed silk, including weight of container	12.00

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL.

		Articles.	Duty.
English transla- tion.	Guatema- lan. tariff.		
840	879	Adzes, including weight of container	<i>Dollars.</i> .30
841	926	Air guns, including weight of container	3.00
842	856	Alphabet, tin, for marking, including weight of container .....	.40
843	896	Anvils (<i>bigornias</i>) iron, all kinds, gross weight .....	.10
844	1121	Anvils (<i>tases</i>), iron, smiths', gross weight .....	.10
845	1144	Anvils (<i>yunques</i>), iron, for mechanics, gross weight .....	.10
846	873	Articles of iron or steel, not specified, including weight or container	1.00
847	874	Articles of iron or steel wire, not specified, including weight of container	1.00
848	875	Articles of tin plate, not specified, including weight of container .....	.40
849	889	Augers, iron or steel, all kinds and sizes, including weight of container .....	.30
850	1012	Axes, gross weight .....	.12
851	976	Axles and axle boxes, iron or steel, all kinds, gross weight, kilo .....	.10
852	883	Balusters, balconies, and lattice, iron, gross weight .....	.20
853	891	Barrels, iron, gross weight .....	.05
854	893	Bases, iron, for columns, gross weight .....	.02
855	880	Basins and chamber pots, iron, all kinds, with or without varnish or enamel, including weight of container .....	.30
856	888	Bath tubs, iron, all kinds, with appurtenances, gross weight .....	.20
857	1143	Beams and rafters, iron, for buildings, gross weight, kilo .....	.02
858	914	Bedsteads or cots, iron, all kinds, without metal ornaments, gross weight .....	.30
859	915	Bedsteads or cots, iron, all kinds, varnished, nickel plated, or with metal ornaments, gross weight .....	.40
860	916	Bells, large and small, iron, including weight of container, kilo .....	.50
861	997	Bits and snaffles, all kinds, and their loose parts, including weight of container	1.50
862	1072	Bolts (fastenings) all kinds, including weight of container .....	.30

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala tariff.		
			<i>Dollars.</i>
863	1075	Bolts (spikes), iron, gross weight.....kilo..	.20
864	1000	Bows (trees), saddle, all kinds, gross weight.....kilo..	.30
865	909	Boxes, or safes (<i>cajas de hierro</i>), iron, all kinds, weighing not more than 10 kilos, gross weight.....kilo..	.25
866	910	Boxes, or safes (<i>cajas de hierro</i>), iron, weighing more than 10 kilos each, gross weight.....kilo..	.15
867	911	Boxes, tin plate, all kinds, including weight of con- tainer.....kilo..	.30
868	1095	Brads, wrought iron or wire, up to 12 millimeters in length, gross weight.....kilo..	.15
869	900	Braziers, iron, weighing not more than 10 kilos, gross weight.....kilo..	.30
870	901	Braziers, iron, weighing more than 10 kilos, gross weight, kilo.....	.15
871	1014	Buckles, iron or steel, all kinds, including weight of con- tainer.....kilo..	.50
872	904	Buffers, iron or steel, for carts or carriages, gross weight, kilo.....	.10
873	886	Bullet molds, iron, all kinds, including weight of con- tainer.....kilo..	.30
874	905	Burins, steel, all kinds, including weight of container, kilo.....	.30
875	1098	Burners, iron, all kinds, for lamps, including weight of container.....kilo..	.50
876	899	Buttons, iron or steel, all kinds, without covering of other material, including weight of container....kilo..	.25
877	897	Butts (hinges), iron, all kinds, gross weight.....kilo..	.25
878	1025	Cages, iron wire, including weight of container....kilo..	.40
879	919	Candelabra, iron, gilt, silver plated, or tinned, with or without foot of other material, weighing 10 kilos or less, gross weight.....kilo..	.24
880	920	Candelabra, iron, gilt, silver plated, or tinned, with or without foot of other material, weighing more than 10 kilos, gross weight.....kilo..	.15
881	921	Candelabra, tin, all kinds, with or without foot of other material, gross weight.....kilo..	.25
882	922	Candlesticks, iron, all kinds, with or without foot of other material, gilt, silver, or nickel plated, gross weight.....kilo..	.30
883	923	Candlesticks, tin, all kinds, with or without foot of other material, including weight of container.....kilo..	.40
884	1069	Candlesticks, flat (<i>palmatorias</i>), iron, or tin, all kinds, in- cluding weight of container.....kilo..	.60
885	894	Canes, iron, with sword, pistol, or air gun, including weight of container.....kilo..	3.00
886	1110	Can openers, iron, all kinds, including weight of con- tainer.....kilo..	.30
887	1107	Casters, iron, for furniture, including weight of con- tainer.....kilo..	.25

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
888	907	Chains, iron, all kinds, gross weight.....kilo..	.25
889	866	Chandeliers (<i>arañas</i>), iron, complete or in parts, with gilt, silver or nickel plating, with or without paint- ing or bronzing, including weight of container.....kilo..	.30
890	867	Chandeliers (<i>arañas</i>), iron, complete or in parts, gilt, silver or nickel plated, including weight of con- tainer.....kilo..	.50
891	912	Chests, assorted, of carpenters' tools, gross weight.....kilo..	.30
892	934	Chisels, iron or steel, gross weight.....kilo..	.30
893	992	Chisels, carpenters', steel, including weight of con- tainer.....kilo..	.30
894	1102	Clocks, iron or steel, table or wall, all kinds, with or without ornaments of other material, including weight of container.....kilo..	.75
895	1103	Clocks, complete, iron or steel, for towers or buildings, gross weight.....kilo..	.10
896	1123	Cloth, iron wire, gross weight.....kilo..	.30
897	908	Coffeepots, tin plate, all kinds, including weight of con- tainer.....kilo..	.40
898	947	Collars, iron, without metal ornaments, including weight of container.....kilo..	.30
899	948	Collars, iron, with metal ornaments, including weight of container.....kilo..	.50
900	946	Columns, or pillars, iron, for buildings, etc., gross weight.....kilo..	.02
901	1073	Combs, iron or steel, all kinds, including weight of con- tainer.....kilo..	.50
902	1074	Combs, weavers', steel, including weight of con- tainer.....kilo..	.20
903	950	Compasses, iron, mechanics', including weight of con- tainer.....kilo..	.30
904	1050	Cork presses, iron, including weight of container.....kilo..	.30
905	1130	Corkserews, iron or steel, all kinds and sizes, including weight of container.....kilo..	1.00
906	1140	Couplings, joints, or fastenings, iron, for buildings or other uses, gross weight.....kilo..	.02
907	890	Crowbars (pinch bars), iron or steel, gross weight.....kilo..	.10
908	1120	Cups, iron or tin, plain, tinned, varnished, or enameled, including weight of container.....kilo..	.30
909	861	Currycombs, iron, all kinds, including weight of con- tainer.....kilo..	.20
910	951	Cutters, steel, for glass, including weight of container, kilo.....kilo..	1.00
911	1096	Daggers (poinards), all kinds and sizes, with or without sheath, including weight of container.....kilo..	8.00
912	902	Drills, or bits (<i>brocas</i>), iron or steel, including weight of container.....kilo..	.30
913	1122	Drills, steel, all kinds, for mechanics, including weight of container.....kilo..	.30

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemalan tariff.		
			Dollars.
914	1136	Drills, iron or steel, for mechanics, with or without accessories, including weight of container kilo..	.30
915	1038	Faucets (cocks), iron, for casks or barrels, including weight of container kilo..	.30
916	930	Ferrules (tips), iron, for canes, etc., including weight of container kilo..	.40
917	993	Figures or statuettes (<i>figuras</i>), iron, weighing not more than 10 kilos each, gross weight kilo..	.40
918	994	Figures or statuettes (<i>figuras</i>) (images), iron, weighing from 10 to 50 kilos each, gross weight kilo..	.30
919	995	Figures, or statuettes (<i>figuras</i>) (images), iron, weighing more than 50 kilos, gross weight kilo..	.25
920	1032	Files, steel, gross weight kilo..	.30
921	870	Firearms, breech-loading or repeating, not specified, (except calibers 58, 50, 44, or 43, which are prohibited), and repairs for same, including weight of container, kilo	2.00
922	871	Firearms, all kinds, not breech-loading or repeating, and repairs for same, including weight of container, kilo .....	.75
923	983	Fire-steels, all kinds, including weight of container, kilo	1.00
924	864	Fishhooks, all kinds, with or without gut and float, including weight of container kilo..	.30
925	1085	Flatirons (sadirons), for laundresses, tailors, and hatters, gross weight kilo..	.12
926	1040	Flowerpots, iron, all kinds, gross weight kilo..	.40
927	991	Foils, fencing, with or without hilts, including weight of container kilo..	1.00
928	996	Forges, portable, iron, gross weight kilo..	.10
929	1023	Forks, farm, with or without handle, gross weight kilo..	.10
930	1125	Forks, iron, common, handle of wood, bone, iron, or horn, dozen .....	.50
931	1126	Forks, iron, good or fine, handle of ivory, mother-of-pearl, or plated dozen	1.50
932	998	Fountains, iron, weighing not more than 50 kilos, gross weight kilo..	.20
933	999	Fountains, iron, weighing more than 50 kilos, gross weight kilo..	.10
934	960	Frames, or trees (<i>cubos</i>) iron, wrought or cast, for saddles, gross weight kilo..	.10
935	1113	Frying pans, iron, all kinds, gross weight kilo..	.30
936	977	Funnels, iron or tin, all kinds and sizes, including weight of container kilo..	.30
937	1056	Furniture, iron, all kinds, complete or in parts, with or without marble tops, or mirrors, gross weight kilo..	.25
938	1145	Girders (<i>zapatas</i>), iron or steel, for buildings, gross weight, kilo .....	.02
939	980	Gouges, steel, including weight of container kilo..	.30

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
940	1011	Gouges, (firmers), steel, including weight of container, kilo .....	.30
941	1071	Grates for boilers, gross weight .....	.05
942	1070	Gridirons (grills), iron, for household use, gross weight, kilo .....	.25
943	840	Groovers, iron or steel, including weight of container, kilo .....	.30
944	917	Gutters, iron, all kinds, gross weight .....	.10
945	1001	Hairpins, wire, including weight of container	1.00
946	1048	Hammers, including weight of container .....	.30
947	1016	Hardware, iron or steel, for doors, windows, and furniture, not specified, including weight of container .....	.30
948	1013	Hatchets, iron or steel, gross weight .....	.30
949	929	Hawkbells (small round bells), iron, all kinds, including weight of container .....	.60
950	1007	Hinges, iron, all kinds, gross weight .....	.25
951	876	Hoes and spades, for agricultural uses, gross weight, kilo ..	.08
952	903	Hook and eyes, iron wire, all kinds, including weight of container .....	.50
953	854	Hook-nails, iron, all kinds, including weight of container kilo .....	.20
954	1002	Hooks, iron or steel, for racks, etc., with or without metal or porcelain knobs, including weight of container, kilo .....	.30
955	872	Hoops, barrel or hogshead, iron, with rivets for same, gross weight .....	.05
956	1015	Horseshoes, iron, all kinds, gross weight .....	.30
957	865	Instruments, reloading, iron or steel, including weight of container	2.50
958	945	Irons, fluting, including weight of container .....	.30
959	1019	Iron, manufactured in articles for household use, not specified, including weight of container .....	.40
960	1006	Jacks, iron, for raising very heavy objects, gross weight, kilo .....	.05
961	1129	Jars (<i>tinajas</i>), iron, plain, varnished or tinned, gross weight .....	.30
962	971	Journal bearings, iron or steel, gross weight .....	.10
963	898	Keyhole guards, iron or steel, all kinds, including weight of container .....	.25
964	1035	Key rings, iron or steel, with or without rings, including weight of container	1.00
965	1036	Keys, iron or steel, including weight of container .....	.30
966	1037	Keys, skeleton, iron or steel, including weight of con- tainer .....	.30
967	956	Knives and forks, common, handle of wood, horn, cellu- loid, iron, or bone	1.00
968	957	Knives and forks, fine, handle of ivory, mother-of-pearl, or plated, not including case	3.00

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemalan tariff.		
			<i>Dollars.</i>
969	958	Knives and forks, common, with or without steel and wooden spoon, without case.....each set..	2.00
970	959	Knives and forks, good and fine, with or without steel and wooden spoon, without case.....each set..	4.00
971	964	Knives, table, common, handle of wood, horn, iron, celluloid or bone.....dozen..	.50
972	965	Knives, table, good or fine, handle of ivory, mother-of-pearl, or plated.....dozen..	1.50
973	966	Knives, saddlers' and shoemakers', with or without handle, including weight of container.....kilo..	.30
974	967	Knives, pointed cast blade, handle of bone, whalebone or horn, including weight of container.....kilo..	.50
975	968	Knives, hunting, with or without sheath, including weight of container.....kilo..	.75
976	1060	Knives (<i>navajas</i>), clasp or spring, including weight of container.....kilo..	4.00
977	1080	Knives, mincing, iron or steel, including weight of container.....kilo..	.30
978	1043	Knobs (handles), iron, for doors or windows, with or without bolt, all kinds, with or without glass or porcelain tablet, including weight of container.....kilo..	.25
979	1033	Knockers, iron, for doors, including weight of container, kilo.....	.25
980	1029	Lamps, iron, complete or in parts, without gilding, silver, or nickel plating, including weight of container.....kilo..	.30
981	1030	Lamps, iron, complete or in parts, gilt, silver or nickel plated, including weight of container.....kilo..	.50
982	1099	Lamps (<i>quinqués</i>), iron, all kinds, gross weight.....kilo..	.50
983	1079	Latches (catches), iron, for doors, all kinds, with or without knobs, including weight of container.....kilo..	.25
984	855	Latches, door, including weight of container.....kilo..	.30
985	978	Lattice-work, iron or steel wire, gross weight.....kilo..	.25
986	1065	Levels, iron or steel, for mechanics, including weight of container.....kilo..	.20
987	847	Links and rings (<i>alacranes</i> and <i>cangrejos</i>), iron, for carriages, etc., including weight of container.....kilo..	.30
988	933	Locks, iron or steel, all kinds, including weight of container.....kilo..	.30
989	1041	Machetes, common, without sheath, gross weight.....kilo..	.12
990	1042	Machetes, fine, steel-tempered, with or without sheath, including weight of container.....kilo..	.30
991	1044	Machines for boxing, embroidering, counting, cutting, sewing, shelling, drawing, folding, fluting, writing, squeezing, bookmaking, sausage and butter making, washing, paper perforating, mincing, feed or tobacco cutting, eyeletting, ruling, irrigating, wood-working, weaving, turning, and the like, when arranged for operation by crank, pedal, or hand lever, and their loose parts, gross weight.....kilo..	.10
992	1045	Machines, as above, moved by horse, water, or steam power, and their loose parts, gross weight.....kilo..	.02

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
993	1046	Machines, not specified, agricultural, moved by horse, water, or steam power, and their loose parts, gross weight kilo ..	.02
994	1047	Machines or motors, steam or wind, and their repairs, gross weight kilo ..	.02
995	927	Masks, iron or steel wire, all kinds each ..	1.00
996	1051	Masks, iron or steel wire, all kinds each ..	1.00
997	943	Mattresses (bed springs), iron or steel wire, gross weight kilo ..	.30
998	944	Mattresses with iron springs, stuffed with hair, wool, or other like materials, gross weight kilo ..	.50
999	1053	Molds, sugar, iron or tin, all kinds, including weight of container kilo ..	.05
1000	1054	Molds, iron or tin, all kinds, including weight of container kilo ..	.10
1001	1039	Monkey-wrenches, for nuts and pipes, including weight of container kilo ..	.25
1002	862	Mortars (<i>almireces</i>), iron, including weight of container, kilo kilo ..	.25
1003	1052	Medals and crosses, iron, all kinds, including weight of container kilo ..	.50
1004	1055	Mills, coffee, iron or steel, including weight of container, kilo kilo ..	.30
1005	937	Nails, wrought iron or wire, gross weight kilo ..	.10
1006	938	Nails, horseshoe, iron or steel, gross weight kilo ..	.12
1007	939	Nails, iron, with brass, glass, or porcelain head, including weight of container kilo ..	.20
1008	940	Nails, roofing, galvanized iron, gross weight kilo ..	.05
1009	936	Necks and pegs, iron, for guitars, including weight of container kilo ..	.30
1010	846	Needles, steel, sewing, embroidering, and knitting, all kinds and sizes, including weight of container kilo ..	.25
1011	970	Nipples, for rifles, shotguns, and pistols, including weight of container kilo ..	.50
1012	1139	Nuts, iron, with or without thread, all kinds, gross weight kilo ..	.12
1013	841	Oilers, iron or tin, for machines, etc., including weight of container kilo ..	.25
1014	843	Ornaments of iron, hollowed or stamped, including weight of container kilo ..	.25
1015	844	Ornaments of tin plate, hollowed or stamped, including weight of container kilo ..	.30
1016	1026	Outfits, iron or tin, for washers, all kinds, complete or in parts, gross weight kilo ..	.30
1017	918	Padlocks, iron or steel, all kinds, including weight of container kilo ..	.30
1018	884	Pails (buckets), iron, all kinds, gross weight kilo ..	.30
1019	885	Pails (buckets), tin, all kinds, gross weight kilo ..	.40
1020	949	Pans, iron, tinned or not, gross weight kilo ..	.20

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1021	1076	Pans or kettles, for sugarhouses, gross weight ....kilo ..	.05
1022	1077	Pans, iron, small, for household use, tinned, varnished, or plain, including weight of container..... kilo ..	.25
1023	935	Pegs and pins, iron, for pianos, including weight of con- tainer.....kilo ..	.20
1024	952	Penknives, common quality, one or two blades....each ..	.12
1025	953	Penknives, better quality, more than two blades....each ..	.25
1026	954	Penknives, good or fine, one or two blades, with or with- out case.....each ..	.37
1027	955	Penknives, good or fine, more than two blades, with or without case.....each ..	.50
1028	1088	Pens, steel, including weight of container..... kilo ..	1.00
1029	1081	Picks and pickaxes, iron, for agricultural uses, with or without handles, gross weight kilo ..	.12
1030	1083	Pincers (<i>pinzas</i>), iron or steel, all kinds, including weight of container..... kilo ..	.30
1031	859	Pincers (<i>alicates</i>), iron or steel, all kinds, including weight of container..... kilo ..	.30
1032	1049	Pile-drivers, gross weight..... kilo ..	.05
1033	857	Pins, safety, iron or steel, including weight of container, kilo ..	.50
1034	858	Pins, common, iron or steel, including weight of con- tainer.....kilo ..	.40
1035	1024	Pitchers, large and small, iron or tin plate, including weight of container..... kilo ..	.30
1036	931	Planes, carpenters', with or without attachments, includ- ing weight of container..... kilo ..	.30
1037	1003	Planes, fore and jack, with or without appurtenances, in- cluding weight of container..... kilo ..	.30
1038	1028	Plate, iron, galvanized, plain or corrugated, for roofing, gross weight..... kilo ..	.01
1039	1084	Plates, iron, for bases of columns, gross weight ....kilo ..	.02
1040	1086	Plates, steel, for engraving, gross weight kilo ..	.20
1041	1087	Plates, large and small, iron or tin, plain, varnished, or painted, including weight of container..... kilo ..	.30
1042	1066	Pots and stew pans, iron, tinned, varnished, or enameled, including weight of container..... kilo ..	.30
1043	1091	Presses, hydraulic or steam, gross weight..... kilo ..	.02
1044	1092	Presses, iron, all kinds, letter-copying, gross weight, kilo ..	.20
1045	1093	Presses, iron, for meat, gross weight kilo ..	.20
1046	1089	Pruning hooks, iron or steel, gross weight..... kilo ..	.12
1047	1059	Pruning knives, straight or curved, including weight of container..... kilo ..	.30
1048	1004	Pulleys, iron, for hanging lamps, etc., including weight of container..... kilo ..	.25
1049	1005	Pulleys and pulley blocks, iron or wood, gross weight, kilo ..	.05

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
1050	1090	Pulleys, iron, for machine belts, gross weight.....kilo..	.02
1051	1108	Pulleys (<i>roldanas</i>), iron, including weight of container, kilo.....	.25
1052	1131	Pulls (knobs), iron, all kinds, for furniture, doors, etc., with or without screws or nuts, including weight of container.....kilo..	.30
1053	1112	Punches (cutting), iron or steel, including weight of container.....kilo..	.30
1054	1097	Punches, steel, including weight of container.....kilo..	.30
1055	979	Rasps, steel, including weight of container.....kilo..	.30
1056	1061	Razors, common quality, loose or on cards, or in paste- board cases, including weight of container.....kilo..	3.00
1057	1062	Razors, good or fine, with or without pasteboard case, including weight of container.....kilo..	8.00
1058	1063	Razors, good or fine, with cases of wood, skin, silk, or other material, including weight of container.....kilo..	10.00
1059	1101	Reflectors, iron or tin, all kinds, including weight of container.....kilo..	.50
1060	1106	Revolvers, all kinds, with or without holsters, includ- ing weight of container.....kilo..	8.00
1061	1141	Ribs corset, etc., iron or steel, covered with cloth or skin, including weight of container.....kilo..	.30
1062	868	Rings, iron or steel, with or without screws, all kinds, including weight of container.....kilo..	.25
1063	1104	Rivets, iron, gross weight.....kilo..	.10
1064	1022	Roasters, coffee, etc., gross weight.....kilo..	.25
1065	1114	Saws and handsaws, for mechanics, with or without handles, gross weight.....kilo..	.30
1066	1115	Saws, circular and band, for machines, gross weight.....kilo..	.10
1067	1116	Saws, woodmen's, gross weight.....kilo..	.12
1068	881	Scales, iron, with or without brass parts, not weighing less than 10 kilos each, including weight of con- tainer.....kilo..	.40
1069	882	Scales, iron, with or without brass parts, weighing more than 10 kilos each, including weight of con- tainer.....kilo..	.20
1070	892	Scales, platform, iron, all kinds, with appurtenances, gross weight.....kilo..	.25
1071	1127	Scissors (shears), iron or steel, common quality, includ- ing weight of container.....kilo..	.50
1072	1128	Scissors (shears), iron or steel, good or fine, all shapes and sizes, with or without cases, including weight of container.....kilo..	2.00
1073	975	Screw-drivers, iron or steel, including weight of con- tainer.....kilo..	.30
1074	1119	Screw-plates, steel, all kinds, including weight of con- tainer.....kilo..	.30
1075	1133	Screws, iron, large, with or without nuts, for paneling of buildings, construction of wagons and carts, gross weight.....kilo..	.12

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
1076	1134	Screws, iron, small, not specified, with or without nuts gross weight.....kilo..	.30
1077	1010	Scythes, with or without handle, gross weight.....	.10
1078	973	Shellers, corn, iron, moved by crank, pedal, or lever, and their loose parts, gross weight.....kilo..	.10
1079	974	Shellers, corn, iron, moved by horse, water, or steam power, and their loose parts, gross weight.....kilo..	.02
1080	1068	Shovels, iron or steel, with or without wooden handles, gross weight.....kilo..	.12
1081	1020	Sickels, iron or steel, including weight of container.....kilo..	.10
1082	869	Side-arms, not specified, and their loose parts, including weight of container.....kilo..	1.00
1083	932	Sieves and cullenders, iron wire, including weight of container.....kilo..	.30
1084	982	Spittoons (cuspidors), iron or tin, all kinds, including weight of container.....kilo..	.75
1085	961	Spoons and ladles, iron, tinned, enameled, or varnished, all sizes, including weight of container.....kilo..	.25
1086	1105	Springs, iron, for furniture seats, gross weight.....kilo..	.25
1087	1057	Springs, steel, for cars or carriages, gross weight.....kilo..	.15
1088	1058	Springs, of steel ribbon, for watches, etc., including weight of container.....kilo..	1.00
1089	984	Spurs, all kinds, iron, with or without attachments, including weight of container.....kilo..	1.00
1090	1064	Spurs (<i>navajas</i>), for game-cocks, including weight of container.....kilo..	10.00
1091	981	Squares, iron or steel, all kinds, including weight of container.....kilo..	.30
1092	1008	Staples (<i>grampas</i>), common, iron, gross weight.....kilo..	.10
1093	1009	Staples (<i>grampas</i>), all kinds, for bookbinding, including weight of container.....kilo..	.10
1094	985	Statues, busts and half-reliefs, iron, weighing not more than 10 kilos, each, gross weight.....kilo..	.30
1095	986	Statues, busts, and half-reliefs, iron, weighing from 10 to 50 kilos each, gross weight.....kilo..	.20
1096	987	Statues, busts, and half-reliefs, iron, weighing more than 50 kilos each, gross weight.....kilo..	.15
1097	842	Steel, in bar or sheet, unmanufactured, gross weight.....kilo..	.03
1098	845	Steels, sharpening, including weight of container.....kilo..	.30
1099	1109	Steelyards or scales, iron, not specified, with their acces- sories, gross weight.....kilo..	.30
1100	906	Stewpans (saucepans), iron, tinned, or not, including weight of container.....kilo..	.30
1101	848	Stills, tin plate, including weight of container.....kilo..	.50
1102	988	Stirrups, iron, all kinds, including weight of con- tainer.....kilo..	.50
1103	860	Stone hammers, iron or steel, including weight of con- tainer.....kilo..	.12

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
1104	989	Stoves and chimneys, iron, weighing not more than 10 kilos each, gross weight..... kilo..	.20
1105	990	Stoves and chimneys, iron, weighing more than 10 kilos each, gross weight..... kilo..	.10
1106	863	Stoves, portable, iron, for heating water, etc., including weight of container..... kilo..	.40
1107	941	Stoves, cooking, iron, all kinds, weighing not more than 10 kilos, gross weight..... kilo..	.30
1108	942	Stoves, cooking, iron, all kinds, weighing more than 10 kilos, gross weight..... kilo..	.10
1109	969	Strings, steel, for musical instruments, including weight of container..... kilo..	1.00
1110	878	Sugar-bowls, iron or tin plate, all kinds, including weight of container..... kilo..	.40
1111	1117	Tacks, iron, up to 12 millimeters long, gross weight..... kilo..	.15
1112	1082	Tankards, (mugs), iron or tin, plain, tinned, varnished, or painted, including weight of container..... kilo..	.30
1113	1118	Tanks, iron, gross weight..... kilo..	.05
1114	972	Thimbles, iron or steel, including weight of container..... kilo..	1.00
1115	1021	Tin plate, plain or stamped, painted or varnished, gross weight..... kilo..	.03
1116	1027	Tin plate or iron plate, perforated, for sieves, gross weight..... kilo..	.10
1117	1034	Tires, iron, for wheels, gross weight..... kilo..	.02
1118	1094	Toe caps, iron, all kinds, for boots and shoes, including weight of container..... kilo..	.30
1119	1017	Tools, common, laborers' and farmers', not specified, gross weight..... kilo..	.12
1120	1018	Tools, fine, mechanics', not specified, gross weight..... kilo..	.30
1121	1124	Tongs, iron, all kinds, for mechanics, including weight container..... kilo..	.30
1122	1135	Traps, iron or steel, for animals, including weight of container..... kilo..	.20
1123	1100	Traps, mouse or rat, iron or partly iron, gross weight..... kilo..	.25
1124	877	Trays (<i>azafates</i>), iron or tin plate, stamped, painted, varnished, or tinned, including weight of container..... kilo..	.40
1125	962	Trowels, iron or steel, mason's, including weight of container..... kilo..	.30
1126	963	Trowels, iron or steel, gardener's, including weight of container..... kilo..	.25
1127	895	Trunks, iron or tin, or lined with these, gross weight, kilo.....	.40
1128	1137	Tubes (pipes), iron, plain or tinned, gross weight..... kilo..	.02
1129	1138	Tubes (pipes), iron, lined or covered, with brass, copper, or white metal, gross weight..... kilo..	.05
1130	924	Tubing (<i>cañería</i>), iron, galvanized or tinned, or not, gross weight..... kilo..	.02
1131	925	Tubing (<i>cañería</i>), iron, nickel-plated, or lined with copper, brass, or white metal, gross weight..... kilo..	.05

SECTION SEVENTH.—ARTICLES OF IRON AND STEEL—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1132	1142	Velocipedes, iron, all kinds, gross weight.....kilo..	.30
1133	1132	Vises, bench, for mechanics, gross weight.....kilo..	.12
1134	887	Waiters (<i>bandejas</i>), iron, enameled or tinned, including weight of container.....kilo..	.40
1135	913	Warming pans, tin plate, including weight of container, kilo.....	.40
1136	1067	Wash basins (<i>palanganas</i>), iron, plain, tinned, varnished, or enameled, gross weight.....kilo..	.30
1137	1031	Washers (<i>lavadores</i>), iron or tin, all kinds, complete or in parts, tinned, painted, or varnished, including weight of container.....kilo..	.30
1138	1078	Weights, loose, for scales and steelyards, including weight of container.....kilo..	.20
1139	928	Wheelbarrows, iron, gross weight.....kilo..	.02
1140	1111	Wheels, iron, for cars, carts, and wheelbarrows, gross weight.....kilo..	.10
1141	849	Wire, iron or steel, galvanized or not, not specified, number 18 or less, Birmingham gauge, including weight of container.....kilo..	.05
1142	850	Wire, iron or steel, galvanized or not, not specified, number 19 or higher, Birmingham gauge, including weight of container.....kilo..	.15
1143	851	Wire, iron or steel, covered with woolen, linen, silk, or paper, for flowers, etc., including weight of container, kilo.....	.40
1144	852	Wire, iron or steel, gilt or silvered, in boxes or reels, for cords, links, etc., including weight of container.....kilo..	.80
1145	853	Wire, iron or steel, flat, for bookbinding, including weight of container.....kilo..	.05

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, LEAD AND TIN.

			<i>Dollars.</i>
1146	1163	Alphabets, copper or its alloys, for marking, including weight of container.....kilo..	.80
1147	1164	Alphabets, zinc, for marking, including weight of container.....kilo..	.60
1148	1306	Ammunition flasks, all kinds, metal, including weight of container.....kilo..	1.00
1149	1179	Articles of copper or its alloys, not white metal, not specified, including weight of container.....kilo..	2.00
1150	1180	Articles of tin, zinc, or lead, not specified, including weight of container.....kilo..	1.50
1151	1181	Articles of wire of copper or its alloys, not specified, including weight of container.....kilo..	2.00
1152	1182	Articles of white metal, not specified, including weight of container.....kilo..	4.00

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1153	1189	Basins and chamber pots, large and small, copper or its alloys, or white metal, gilt, silver, or nickel plated, including weight of container.....kilo..	4.00
1154	1263	Beadings (moldings) for carriages, copper and its alloys, gilt, silver, or nickel plated, including weight of container.....kilo..	.80
1155	1209	Bedsteads or cots, brass, all kinds, gross weight.....kilo..	.60
1156	1210	Bells, copper or its alloys, all kinds, including weight of container.....kilo..	.60
1157	1315	Bolts, door, etc., copper or its alloys, all kinds, including weight of container.....kilo..	.60
1158	1317	Bolts (spikes), copper or its alloys, gross weight.....kilo..	.40
1159	1204	Boxes, copper or its alloys, silver or nickel plated, or gilt, or of white metal with or without lining or covering of skin or silk or cloth containing silk, including weight of container.....kilo..	1.50
1160	1205	Boxes, copper or its alloys, not specified, weighing not more than 10 kilos each, including weight of container.....kilo..	1.00
1161	1206	Boxes, copper and its alloys, not specified, weighing more than 10 kilos each, including weight of container, kilo.....	.30
1162	1207	Boxes, tin or lead, not specified, including weight of container.....kilo..	.30
1163	1194	Bracelets, copper or its alloys, or white metal, with or without case, gilt, silver, or nickel plated, including weight of container.....kilo..	2.00
1164	1327	Bracelets, copper or its alloys, zinc, tin, or pewter, plain, gilt, or silver-plated, with or without ornaments of other materials, including weight of container.....kilo..	2.00
1165	1264	Braid (fringe), common metal, gilt or silvered, including weight of container.....kilo..	6.00
1166	1265	Braid (fringe), common metal, not gilt or silvered, including weight of container.....kilo..	3.00
1167	1326	Breast pins, copper or its alloys, zinc, tin, or pewter, plain, gilt, or silver-plated, with or without ornaments of other materials, including weight of container.....kilo..	2.00
1168	1199	Bronze, in ingots, gross weight.....kilo..	.05
1169	1276	Buckles, copper or its alloys, all kinds, including weight of container.....kilo..	.80
1170	1218	Bugles (canutillo), common metal, gilt or silver-plated, including weight of container.....kilo..	4.00
1171	1187	Bullet molds, copper or its alloys, or white metal, gilt, silver or nickel plated, including weight of container, kilo.....	.60
1172	1331	Burners, copper or its alloys, for lamps of all kinds, including weight of container.....kilo..	.60

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1173	1192	Buttons and links, copper or its alloys, or white metal, gilt, silver or nickel plated, including weight of container kilo..	2. 00
1174	1193	Buttons, tin, lead, or other metal not specified, including weight of container..... kilo..	1. 00
1175	1281	Cages, bird, bronze or copper, including weight of container kilo..	. 80
1176	1212	Candelabra, copper or its alloys, gilt or silver plated, with or without foot of other material, weighing 10 kilos or less each, including weight of container, kilo ..	1. 50
1177	1213	Candelabra, copper or its alloys, gilt or silver plated, with or without foot of other material, weighing more than 10 kilos each, including weight of container, kilo ..	. 75
1178	1214	Candelabra, white metal, all kinds, with or without foot of other material, including weight of container. kilo..	1. 50
1179	1215	Candelabra, zinc, all kinds, with or without foot of other material, including weight of container..... kilo..	. 50
1180	1216	Candlesticks, copper or its alloys, or white metal, gilt, silver or nickel plated, with or without foot of other material, including weight of container..... kilo..	. 80
1181	1217	Candlesticks, tin or lead, including weight of container, kilo ..	. 40
1182	1314	Candlesticks (<i>palmatorias</i>), flat, copper, or its alloys, or white metal, gilt, silver or nickel plated, including weight of container kilo..	. 80
1183	1221	Caps, bottle, including weight of container kilo..	. 50
1184	1270	Caps, percussion, copper or brass, for firearms, including weight of container..... kilo..	1. 00
1185	1341	Castors, copper or its alloys, for furniture, including weight of container..... kilo..	. 50
1186	1171	Castors, copper, brass, white metal, and their alloys, plain or figured, with or without appurtenances of other material, including weight of container..... kilo..	3. 00
1187	1201	Chains, copper or its alloys, including weight of container kilo..	. 50
1188	1202	Chains, watch, copper or its alloys, gilt, silver, or nickel plated, all kinds, including weight of container kilo..	2. 00
1189	1175	Chandeliers (<i>arañas</i>), copper or its alloys, complete or in parts, without gilding, silver or nickel plating, including weight of container kilo..	. 60
1190	1176	Chandeliers (<i>arañas</i>), copper or its alloys, complete or in parts, gilt, silver, or nickel plated, including weight of container..... kilo..	1. 00
1191	1262	Checks, copper, brass, or nickel, for plantations and other uses, including weight of container..... kilo..	. 50
1192	1335	Clocks, copper or brass, for buildings, complete, gross weight kilo..	. 20

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
1193	1336	Clocks, copper or brass, for table or wall, all kinds, with or without ornaments of other material, including weight of container kilo..	1.00
1194	1337	Clocks, striking, all kinds of metal, except gold, silver, and platinum each..	5.00
1195	1338	Clocks, not striking, any metal except gold, silver, or platinum each..	1.00
1196	1203	Coffeepots, copper or its alloys, all kinds, including weight of container kilo..	.80
1197	1232	Collars, copper and its alloys or white metal, all kinds, for animals, including weight of container..... kilo..	.80
1198	1234	Compasses, bronze or its alloys, all kinds, including weight of container..... kilo..	.50
1199	1228	Copper, bronze, or white metal, in ingots or granulated, gross weight..... kilo..	.05
1200	1229	Copper, brass, bronze, or white metal, in bars, gross weight kilo..	.20
1201	1230	Copper, brass, bronze, or white metal, in sheets or plates, gross weight..... kilo..	.25
1202	1231	Copper, in sheets, polished, for engraving, including weight of container..... kilo..	.10
1203	1235	Cord, common metal, gilt or silvered, with or without inside of other material, including weight of container kilo..	4.00
1204	1354	Corkscrews, copper or its alloys or white metal, all kinds and sizes, including weight of container..... kilo..	2.00
1205	1236	Crosses, copper or its alloys, all kinds, including weight of container kilo..	.80
1206	1361	Cruets (<i>vinageras</i>), copper or its alloys, or white metal, gilt, silver, or nickel plated, including weight of container kilo..	4.00
1207	1351	Cups, copper or its alloys or white metal, gilt, silver, or nickel plated, including weight of container kilo..	4.00
1208	1168	Currycombs, copper and its alloys, including weight of container kilo..	.40
1209	1251	Edging (trimming), common metal, gilt or silvered, including weight of container kilo..	4.00
1210	1252	Edging (trimming), common metal, not gilt or silvered, including weight of container kilo..	2.00
1211	1328	Edging, narrow (<i>puntilla</i>), copper or brass, including weight of container kilo..	.50
1212	1244	Embroidery thread, common metal, not gilt or silvered, including weight of container..... kilo..	2.00
1213	1245	Embroidery thread, common metal, gilt or silvered, including weight of container..... kilo..	4.00
1214	1248	Enamel, in sheets or leaves, including weight of container kilo..	4.00
1215	1249	Enamel, cut in shapes, for embroidery and other uses, including weight of container kilo..	6.00

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
1216	1309	Eyelets, metal, all kinds, for clothing or boots and shoes, including weight of container kilo..	.80
1217	1294	Faucets or cocks, copper or its alloys, for casks, barrels, etc., including weight of container kilo..	.60
1218	1259	Figures or statuettes (<i>figuras</i>), brass, bronze, or zinc, weighing not more than 10 kilos each, gross weight. kilo..	1.00
1219	1260	Figures or statuettes (<i>figuras</i>), brass, bronze, or zinc, weighing more than 10 kilos each, gross weight. kilo..	.50
1220	1261	Figures or statuettes (<i>figuras</i>), brass, bronze, or zinc, weighing more than 50 kilos each, gross weight. kilo..	.25
1221	1287	Filings, copper or bronze, gross weight kilo..	.20
1222	1288	Filings, tin or zinc, gross weight kilo..	.15
1223	1250	Fire steels (cigar-lighters), copper and its alloys or white metal, for smokers, including weight of container. kilo..	2.00
1224	1295	Flowerpots, copper or its alloys, gross weight kilo..	.50
1225	1266	Flower vases, copper or its alloys, gilt, silver, or nickel-plated, including weight of container kilo..	4.00
1226	1352	Forks, tin, lead, British metal, or pewter, including weight of container kilo..	.75
1227	1353	Forks, copper or its alloys or white metal, gilt, silver or nickel plated, including weight of container. kilo..	4.00
1228	1268	Fountains, copper or its alloys, weighing not more than 50 kilos each, gross weight kilo..	.40
1229	1269	Fountains, copper or its alloys, weighing more than 50 kilos, gross weight kilo..	.20
1230	1298	Frames (picture, mirror, etc.), copper or its alloys or white metal, tin, or zinc, including weight of container. kilo..	1.00
1231	1345	Frying pans, copper or its alloys, varnished or tinned, gross weight kilo..	.60
1232	1242	Funnels, copper or its alloys, including weight of container kilo..	.60
1233	1304	Furniture, copper or brass, tin, zinc, or other like metal, all kinds, complete or in parts, with or without marble tops, or mirrors, gross weight kilo..	.50
1234	1271	Galloon, common metal, gilt or silvered, including weight of container kilo..	6.00
1235	1272	Hairpins, brass or white metal, with or without ornaments of other materials, including weight of container, kilo	2.00
1236	1296	Handles, copper or its alloys or white metal, all kinds, with or without glass or porcelain, with or without bolts, including weight of container kilo..	.50
1237	1330	Handles (<i>puños</i>), copper or its alloys, gilt, silver, or nickel plated, all kinds, for canes, including weight of container kilo..	1.00
1238	1277	Hardware, bronze or its alloys, for doors, windows, or furniture, not specified, including weight of container, kilo .....	.60
1239	1222	Hawkbells, copper or brass, all kinds, including weight of container kilo..	.80

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1240	1275	Hinges, bronze or its alloys, all kinds, gross weight, kilo.....	.50
1241	1190	Hinges (butts), copper and its alloys, all kinds, gross weight kilo..	.50
1242	1273	Hooks, copper or its alloys, for racks and other uses, with or without porcelain or glass knobs, including weight of container kilo..	.60
1243	1161	Hook nails, copper and its alloys, all kinds, including weight of container kilo..	.40
1244	1197	Hooks and eyes, of copper wire or copper alloys, all kinds, including weight of container kilo..	.70
1245	1148	Jewelry, sets (<i>aderezos</i>), copper or its alloys, with or without ornaments of other material, for women, including weight of container..... kilo..	2.00
1246	1240	Journal bearings, bronze or brass, gross weight..... kilo..	.50
1247	1319	Kettles, small, copper or its alloys, for household use, plain, tinned, or varnished, including weight of container kilo..	.50
1248	1191	Keyhole guards, copper and its alloys, including weight of container..... kilo..	.50
1249	1291	Keyrings, copper or its alloys, with or without chain, including weight of container kilo..	2.00
1250	1292	Keys, copper or its alloys, including weight of container, kilo.....	.60
1251	1293	Keys, skeleton, copper or its alloys, including weight of container kilo..	.60
1252	1355	Knobs (pulls), copper or its alloys, or white metal, gilt, silver or nickel plated, for furniture, doors, etc., with or without screws or nuts, including weight of container..... kilo..	.60
1253	1290	Knockers, door, copper or its alloys, including weight of container kilo..	.50
1254	1332	Lamps (<i>quínques</i>), copper or its alloys, or white metal, all kinds, including weight of container kilo..	.60
1255	1283	Lamps, copper or its alloys, mounted or unmounted, without gilt, silver, or nickel plating, including weight of container kilo..	.60
1256	1284	Lamps, copper or its alloys, mounted or unmounted, gilt, silver, or nickel plated, including weight of container, kilo.....	1.00
1257	1289	Lanterns, copper or its alloys, including weight of container kilo..	1.00
1258	1162	Latches (door handles), copper and its alloys, including weight of container..... kilo..	.60
1259	1323	Lead, in bar, sheet, or leaf, for roofing, gross weight. kilo..	.05
1260	1243	Lattice-work, copper or bronze wire, including weight of container kilo..	.50
1261	1308	Levels, copper or its alloys or white metal, for mechanics, including weight of container..... kilo..	.40

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1262	1153	Links and rings, copper and its alloys, for carriages and other uses, including weight of container kilo..	.60
1263	1224	Locks or plates, copper or its alloys, all kinds, including weight of container kilo..	.60
1264	1146	Loops (<i>abrazaderas</i>), copper or brass, all kinds, with or without ornaments of other materials, including weight of container kilo..	1.50
1265	1267	Matchboxes, copper and its alloys or white metal, gilt, silver, or nickel plated, including weight of container, kilo ..	2.00
1266	1301	Measures, copper or its alloys, for dimensions or capacity, including weight of container kilo..	.50
1267	1299	Medals, copper or its alloys, all kinds, silver or nickel plated, including weight of container kilo..	.80
1268	1300	Medallions, copper or its alloys, all kinds, gilt, silver, or nickel plated, including weight of container kilo..	.70
1269	1169	Mortars (<i>almireces</i> and <i>morteros</i>), copper and its alloys, including weight of container kilo..	.50
1270	1303	Moldings, copper or its alloys, gilt, silver, or nickel plated, including weight of container kilo..	.60
1271	1302	Molds, candle or other, copper or its alloys, including weight of container kilo..	.25
1272	1226	Nails, copper or brass, gross weight kilo..	.50
1273	1227	Nails, zinc, gross weight kilo..	.30
1274	1233	Necklaces, common metal, all kinds, for women, with or without ornaments of other material, including weight of container kilo..	2.00
1275	1152	Needles of copper and its alloys, embroidery or knitting, all kinds and sizes, including weight of container. kilo..	.50
1276	1344	Nut-crackers, all kinds, metal, not specified, including weight of container kilo..	.60
1277	1358	Nuts, brass or copper, with or without thread, including weight of container kilo..	.60
1278	1359	Nuts, lead or zinc, including weight of container kilo..	.10
1279	1147	Oilers, copper, for machinery and other uses, including weight of container kilo..	.50
1280	1149	Ornaments of copper, brass, or white metal, all kinds, stamped or hollowed, including weight of container, kilo ..	.50
1281	1150	Ornaments of tin or lead, for buildings or gardens, including weight of container kilo..	.40
1282	1151	Ornaments of zinc, hollowed or stamped, including weight of container kilo..	.40
1283	1211	Padlocks, copper or brass, all kinds, including weight of container kilo..	.60
1284	1318	Pans or kettles, copper, for sugar houses, gross weight, kilo ..	.10
1285	1198	Paper fasteners, metal, all kinds, including weight of container kilo..	1.00

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1286	1316	Pearls (imitation), metal, common, all kinds and shapes, including weight of container.....kilo..	1.00
1287	1225	Pegs, guitar, copper and its alloys, all kinds, including weight of container.....kilo..	.60
1288	1285	Pencil holders, copper or its alloys or white metal, all kinds, with or without pencil, including weight of container.....kilo..	1.00
1289	1177	Pendants or ear rings, copper or its alloys, with or without ornaments of other material, including weight of container.....kilo..	2.00
1290	1165	Pins, common brass, all kinds, including weight of container.....kilo..	.50
1291	1166	Pins, safety, brass, including weight of container.....kilo..	.60
1292	1167	Pins, copper and its alloys, for the hair or cravat, including weight of container.....kilo..	1.50
1293	1280	Pitchers, large and small, copper or its alloys, all kinds, gross weight.....kilo..	.60
1294	1321	Plates, copper or its alloys, or white metal, gilt, silver or nickel plated, including weight of container.....kilo..	4.00
1295	1322	Plumb lines, copper or its alloys, for mechanics, including weight of container.....kilo..	.80
1296	1325	Portemonnaies, copper or its alloys, all kinds, including weight of container.....kilo..	1.50
1297	1310	Pots, copper or its alloys, plain, tinned, or varnished, including weight of container.....kilo..	.60
1298	1324	Powder flasks, metal, all kinds, including weight of container.....kilo..	1.00
1299	1274	Pulleys, copper and its alloys, for hanging lamps, etc., including weight of container.....kilo..	.50
1300	1334	Reflectors, copper or its alloys, silver or nickel plated, including weight of container.....kilo..	.60
1301	1172	Rings, finger, copper or its alloys, all kinds, with or without stones, including weight of container.....kilo..	2.00
1302	1173	Rings, finger, zinc or tin, all kinds, including weight of container.....kilo..	1.00
1303	1174	Rings, napkin, copper or its alloys or white metal, gilt, silver, or nickel plated, including weight of container.....kilo..	4.00
1304	1178	Rings, copper or its alloys, with or without screws, all kinds, including weight of container.....kilo..	.50
1305	1339	Rivets, brass or copper, all kinds, including weight of container.....kilo..	.25
1306	1185	Scales, brass or copper, weighing ten kilos or less, including weight of container.....kilo..	.80
1307	1186	Scales, brass or copper, weighing more than ten kilos, including weight of container.....kilo..	.40
1308	1343	Scales, or steelyards, copper or brass, all kinds not specified, with their appurtenances, gross weight.....kilo..	.60
1309	1356	Screws, copper or brass, all kinds and sizes, with or without nuts, including weight of container.....kilo..	.60

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala tariff.		
			<i>Dollars.</i>
1310	1362	Shavings or turnings, bronze, brass, or white metal, including weight of container.....kilo..	.10
1311	1342	Sheaves, copper or its alloys, all kinds, including weight of container.....kilo..	.50
1312	1307	Shot, small, lead, gross weight.....kilo..	.15
1313	1223	Sieves or cullenders, copper wire, including weight of container.....kilo..	.60
1314	1346	Soldering irons, copper, with or without handle of other material, gross weight.....kilo..	.60
1315	1347	Solders, copper, bronze, or brass, gross weight....kilo..	.12
1316	1348	Solders, lead or tin, gross weight.....kilo..	.10
1317	1195	Spangles (<i>bricho</i>), common metal, gilt or silver plated, including weight of container.....kilo..	4.00
1318	1196	Spangles (<i>bricho</i>), common metal, plain, not gilt or silvered, including weight of container.....kilo..	2.00
1319	1286	Spangles (<i>lentejuela</i>), metal, gilt or silvered, including weight of container.....kilo..	4.00
1320	1247	Spittoons (cuspidors), copper and its alloys, all kinds, including weight of container.....kilo..	1.50
1321	1237	Spoons, large and small, and ladles, copper and its alloys or white metal, gilt, silver, or nickel plated, including weight of container.....kilo..	4.00
1322	1238	Spoons, large and small, and ladles, tin, lead, or pewter, including weight of container.....kilo..	.75
1323	1305	Springs, copper or its alloys, for furniture, including weight of container.....kilo..	.50
1324	1340	Springs, copper or its alloys, for furniture seats, gross weight.....kilo..	.50
1325	1253	Spurs, all kinds, copper and its alloys or white metal, including weight of container.....kilo..	2.00
1326	1246	Squares, copper and its alloys, all kinds, including weight of container.....kilo..	.60
1327	1255	Statues, busts, and half reliefs, brass, bronze, or zinc, weighing not more than 10 kilos each, gross weight, kilo.....	1.00
1328	1256	Statues, busts, and half reliefs, brass, bronze, or zinc, weighing more than 10 kilos each, gross weight....kilo..	.50
1329	1257	Statues, busts, and half reliefs, brass, bronzes, or zinc, weighing more than 50 kilos each, gross weight....kilo..	.25
1330	1200	Stewpans (saucepans), copper or its alloys, not tinned or varnished, including weight of container....kilo..	.60
1331	1154	Stills, copper, all kinds, of more than 1 gallon capacity, and their loose parts, including weight of container, kilo.....	1.00
1332	1258	Stirrups, copper and its alloys or white metal, all kinds, including weight of container.....kilo..	1.00
1333	1170	Stoves, portable, copper and its alloys, for heating water and other liquids, including weight of container....kilo..	.80

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1334	1184	Sugar-bowls, copper, brass, white metal or its alloys, gilt, silver or nickel plated, including weight of container .....kilo..	4.00
1335	1282	Syringes, copper or its alloys or other metal, including weight of container.....kilo..	1.00
1336	1349	Tacks, copper or brass or iron, with copper or brass heads, 12 millimeters long or less, gross weight ..kilo..	.50
1337	1350	Tacks, zinc, gross weight ..kilo..	.30
1338	1239	Thread-counters, bronze or white metal, all kinds, including weight of container.....kilo..	1.00
1339	1278	Thread, fine wire (<i>hilillo</i>), copper or brass, gilt or silvered, in boxes or spools, including weight of container.....kilo..	1.00
1340	1279	Thread (<i>hojuela</i>), fine wire, flat, copper or brass, gilt or silvered, in boxes or spools, including weight of container.....kilo..	1.00
1341	1241	Thimbles, copper or its alloys, including weight of container.....kilo..	2.00
1342	1254	Tin in bars or sheets, gross weight ..kilo..	.05
1343	1311	Tinsel, gold or silver, in leaves or sheets, including weight of container.....kilo..	4.00
1344	1312	Tinsel, gold or silver, cut in shapes, for embroidery or other uses, including weight of container.....kilo..	6.00
1345	1329	Toe-caps, copper or brass, all kinds, for boots and shoes, including weight of container.....kilo..	.60
1346	1333	Traps, rat or mouse, copper or its alloys, with or without parts of other materials, gross weight ..kilo..	.50
1347	1183	Trays (<i>azafates</i>), copper, brass, white metal, or its alloys, gilt, silver, or nickel plated, including weight of container.....kilo..	4.00
1348	1188	Trays (<i>bandejas</i>), copper or its alloys, and white metals, gilt, silver or nickel plated, including weight of container.....kilo..	4.00
1349	1357	Tubes (pipes), copper, brass, bronze, or white metal, gross weight.....kilo..	.20
1350	1219	Tubing, copper and its alloys or white metal, gross weight.....kilo..	.20
1351	1220	Tubing, lead or tin, gross weight.....kilo..	.05
1352	1360	Vases, copper or its alloys or white metal, gilt, silver or nickel plated, including weight of container.....kilo..	4.00
1353	1208	Warming-pans, copper or bronze, all kinds, including weight of container.....kilo..	.80
1354	1313	Wash-basins, copper and its alloys or white metal, gilt, silver or nickel plated, including weight of container, kilo.....	4.00
1355	1297	Weights, copper or its alloys, for scales, including weight of container.....kilo..	.60
1356	1320	Weights, copper or its alloys, for scales or steelyards, including weight of container.....kilo..	.60

SECTION EIGHTH.—ARTICLES OF COPPER AND ITS ALLOYS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatema- lan tariff.		
			<i>Dollars.</i>
1357	1155	Wire, copper or brass, galvanized or not, not specified, up to No. 18 Birmingham gauge, including weight of container.....kilo..	.10
1358	1156	Wire, copper or brass, galvanized or not, not specified, No. 19 Birmingham gauge or higher, including weight of container.....kilo..	.30
1359	1157	Wire, copper and its alloys, covered with linen, wool, silk, or paper, for flowers and other uses not specified, including weight of container.....kilo..	.80
1360	1158	Wire, copper or its alloys, gilt or silvered, in boxes or on reels (spools), including weight of container....kilo..	1.60
1361	1159	Wire, copper and its alloys, flat, for bookbinding, including weight of container.....kilo..	.10
1362	1160	Wire, tin and its alloys, including weight of container, kilo.....	.10
1363	1363	Zinc, rolled (sheet), gross weight.....kilo..	.10
1364	1364	Zinc, in pig or bars, gross weight.....kilo..	.05

SECTION NINTH.—ARTICLES OF WOOD AND OF WOOD AND IRON.

			<i>Dollars.</i>
1365	1383	Artificial arms and legs, all kinds, including weight of container.....kilo..	.30
1366	1370	Articles, wooden, not specified, including weight of container.....kilo..	.60
1367	1371	Articles, wooden, with cloth of silk or containing silk, or with skin, even when they have ornaments of metal, except those specified, including weight of container, kilo.....	2.00
1368	1375	Barrels, casks, and hogsheads, wooden, empty, set up, or in shooks, gross weight.....kilo..	.03
1369	1403	Beds, camp, wooden, gross weight.....kilo..	.40
1370	1452	Blinds, lattice, or shades, wooden, including weight of container.....kilo..	.40
1371	1423	Blocks and lasts, for hats, shoes, wigs, etc., even partly of iron, including weight of container.....kilo..	.10
1372	1456	Boards, chess, or draughts, including weight of container.....kilo..	1.00
1373	1368	Bows, wooden, wagon, gross weight.....kilo..	.10
1374	1369	Bows, wooden, carriage, gross weight.....kilo..	.50
1375	1384	Brush, paint, all kinds and sizes, not specified, including weight of container.....kilo..	.40
1376	1374	Buckets (pails), wooden, all kinds, including weight of container.....kilo..	.30
1377	1460	Bungs, wooden, gross weight.....kilo..	.10

SECTION NINTH.—ARTICLES OF WOOD AND OF WOOD AND IRON—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatema- lan tariff.		
			<i>Dollars.</i>
1378	1385	Busts and half reliefs, wooden or imitations of wood, weight not exceeding 10 kilos each, gross weight, kilo	1. 00
1379	1382	Buttons, wooden, without covering, all kinds, including weight of container .....	. 50
1380	1377	Canes, wooden, without sword or metal handle, includ- ing weight of container	2. 00
1381	1378	Canes, wooden, with sword or metal handle, including weight of container	4. 00
1382	1390	Carriages, weighing up to 100 kilos each, net weight, kilo .....	. 60
1383	1391	Carriages, weighing from 100 to 250 kilos each, net weight .....	. 55
1384	1392	Carriages, weighing from 250 to 500 kilos each, net weight .....	. 50
1385	1393	Carriages, weighing from 500 to 750 kilos each, net weight .....	. 45
1386	1394	Carriages, weighing from 750 to 1,000 kilos each, net weight .....	. 40
1387	1395	Carriages, weighing more than 1,000 kilos each, net weight .....	. 35
1388	1396	Carriages, weighing up to 100 kilos each, unfinished, without upholstering or painting, net weight .....	. 30
1389	1397	Carriages, weighing from 100 to 250 kilos each, unfinished, without upholstering or painting, net weight .....	. 25
1390	1398	Carriages, weighing from 250 to 500 kilos each, unfin- ished, without upholstering or painting, net weight, kilo .....	. 20
1391	1399	Carriages, weighing from 500 to 750 kilos each, unfin- ished, without upholstering or painting, net weight, kilo .....	. 15
1392	1400	Carriages, weighing from 750 to 1,000 kilos each, unfin- ished, without upholstering or painting, net weight, kilo .....	. 12
1393	1401	Carriages, weighing more than 1,000 kilos each, unfin- ished, without upholstering or painting, gross weight, kilo .....	. 10
1394	1402	Carriages, childrens', all kinds, gross weight .....	. 30
1395	1386	Carts and handcarts, intended solely for transporting light loads in towns and cities, with or without springs, gross weight .....	. 25
1396	1461	Carvings, wooden, all kinds, for ornaments of furniture and other uses, including weight of container .....	. 50
1397	1366	Casters, wooden, without metal lining, with or without cruets, including weight of container	2. 00
1398	1451	Combs, wooden, all kinds, including weight of container, kilo .....	. 50
1399	1404	Corks, gross weight .....	. 50
1400	1457	Cues, billiard, wooden, gross weight .....	. 40

SECTION NINTH. ARTICLES OF WOOD AND OF WOOD AND IRON. -Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
1401	1365	Fans with wooden ribs, including weight of container kilo	2.00
1402	1376	Frames and easels (<i>bastidores</i>), for embroidering, painting or drawing, wooden, all kinds, including weight of container .....	.20
1403	1436	Frames (<i>marcos</i>), wooden, all kinds and sizes, plain, gilt, silver-plated, bronzed, varnished, or painted, or with ornaments of other materials, gross weight .....	.50
1404	1419	Figures or statuettes (<i>figuras</i>), wooden, not weighing more than 10 kilos each, including weight of container, kilo	2.00
1405	1420	Figures or statuettes (<i>figuras</i>), wooden, weighing more than 10 kilos each, including weight of container	1.00
1406	1428	Faucets and spigots, wooden, for casks, barrels, or other uses, including weight of container .....	.60
1407	1444	Furniture, fine or ordinary wood, veneered with fine wood, with or without mirrors or marble tops, gross weight, kilo .....	.40
1408	1445	Furniture, fine or ordinary wood, veneered with fine wood, upholstered with skin or cloth not containing silk, with or without marble tops or mirrors, gross weight .....	.50
1409	1446	Furniture, fine or ordinary wood, veneered with fine wood, upholstered with silk material, or material containing silk, with or without marble tops or mir- rors, gross weight .....	.70
1410	1447	Furniture, bent-wood, rattan, or osier, with or without marble tops or mirrors, gross weight .....	.35
1411	1448	Furniture, all kinds, with inlaid work, marqueline or ornaments of wood, shell, tortoise shell, ivory, or metal, gross weight .....	.70
1412	1449	Furniture, wooden, not upholstered, with polish, var- nish, paint, turned parts, or wicker work, gross weight, kilo .....	.20
1413	1381	Guards, keyhole, wooden, including weight of container, kilo .....	.50
1414	1424	Glove stretchers, wooden, including weight of container, kilo	1.00
1415	1434	Handles, wooden, for tools, gross weight .....	.12
1416	1458	Heels, wooden, for boots and shoes, including weight of container .....	.50
1417	1438	Hubs, stakes, and spokes for wagons and carriages, gross weight .....	.06
1418	1450	Levels, wooden, mechanics', including weight of container, kilo .....	.30
1419	1435	Mannequins, wooden, all kinds, for modistes, tailors, gross weight .....	.20
1420	1421	Matches, wooden, gross weight .....	.20
1421	1441	Measures, wooden, longitudinal, including weight of con- tainer .....	.20

SECTION NINTH.—ARTICLES OF WOOD AND OF WOOD AND IRON—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala tariff.		
			<i>Dollars.</i>
1422	1443	Mosaics, wooden, for pavements, gross weight .....kilo..	.40
1423	1442	Moldings, wooden, all kinds, with or without ornaments of other materials, gross weight .....kilo..	.20
1424	1411	Omnibuses and stagecoaches, for passengers, net weight, kilo .....	.20
1425	1408	Paper-cutters, wooden, including weight of container, kilo	2.00
1426	1425	Pieces, wooden, for loto, chess, dominos, draughts, and the like, with or without their boards or other accessories, including weight of container .....kilo..	1.00
1427	1427	Poles and shafts, wooden, for carriages, gross weight, kilo .....	.60
1428	1410	Reels, wooden, all kinds, including weight of container, kilo .....	.30
1429	1367	Rings, napkin, wooden, all kinds, including weight of container .....kilo..	1.00
1430	1453	Rosaries of wooden beads or small stones of fruits, in- cluding weight of container .....kilo..	.50
1431	1426	Running gears, front, for carriages, gross weight...kilo..	.60
1432	1422	Saddletrees, wooden, even partly of iron, including weight of container .....kilo..	.50
1433	1462	Screws, wooden, all kinds, gross weight .....kilo..	.12
1434	1414	Shoe pegs, wooden, gross weight .....kilo..	.20
1435	1406	Spoons and forks, wooden, salad, including weight of container .....kilo..	1.00
1436	1407	Spoons, wooden, small, including weight of container, kilo	2.00
1437	1413	Squares, mechanics', wooden, including weight of con- tainer .....kilo..	.30
1438	1415	Squeezers, wooden, for expressing fruit juices, even when they have parts of other materials, including weight of container .....kilo..	.30
1439	1372	Stands or mats (<i>asientos</i>) for dishes or bottles, wooden, all kinds and sizes, including weight of container, kilo	1.00
1440	1416	Statues, wooden, not weighing more than 10 kilos each, including weight of container.....kilo..	2.00
1441	1417	Statues, wooden, weighing more than 10 kilos each, in- cluding weight of container.....kilo..	1.00
1442	1412	Staves, cask, hogshead, or barrel, gross weight....kilo..	.01
1443	1418	Stirrups, wooden, even partly of iron, including weight of container .....kilo..	.50
1444	1459	Stoppers, cork, with metal tops, including weight of con- tainer .....kilo..	1.00
1445	1439	Tables, billiard, wooden, cloth and other appurtenances not included, gross weight .....kilo..	.30
1446	1440	Tables or platens, common wood, marble, slate, or iron tops, for printing offices, gross weight .....kilo..	.02
1447	1437	Tapers, floating, cork, for night lamps, including weight of container.....kilo..	.60

SECTION NINTH.—ARTICLES OF WOOD AND OF WOOD AND IRON—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1448	1373	Trays (<i>azafates</i>), wooden, all kinds, including weight of container.....kilo..	1.00
1449	1379	Trunks or chests, wooden, without coverings of other material, gross weight.....kilo..	.50
1450	1380	Trunks or chests, wooden, covered with cotton or linen, gross weight.....kilo..	.60
1451	1405	Tubs and pails, wooden, all kinds, including weight of container.....kilo..	.30
1452	1409	Veneering, wooden, fine, for furniture, gross weight, kilo.....	.50
1453	1388	Wagons, carts, and drays, without springs, gross weight, kilo.....	.10
1454	1389	Wagons, carts, and drays, with springs, gross weight, kilo.....	.42
1455	1387	Wheelbarrows, 1 or 2 wheels, gross weight.....kilo..	.02
1456	1454	Wheels, wooden, wagon, stage coach, or omnibus, gross weight.....kilo..	.20
1457	1455	Wheels, wooden, carriage, gross weight.....kilo..	.60
1458	1429	Wood or timber, common, for building, sawed into blocks beams, planks, or common boards, gross weight.....kilo..	.01
1459	1430	Wood or timber, in boards, planed or tongued and grooved, for floors or other purposes, gross weight.....kilo..	.02
1460	1431	Wood or timber, dressed, for carriage bodies, gross weight, kilo.....	.03
1461	1432	Wood or timber, in sheets, for match boxes, gross weight, kilo.....	.04
1462	1433	Wood or timber, wrought, cut, and prepared for packing boxes, gross weight.....kilo..	.05

SECTION TENTH.—ARTICLES OF LEATHER AND SKIN.

			<i>Dollars.</i>
1463	1464	Albums, cover of leather or skin, with or without photographs or metal ornaments, including weight of container.....kilo..	4.00
1464	1468	Articles of leather or skin, not specified, including weight of container.....kilo..	2.00
1465	1475	Bags, hand, traveling, leather, all kinds, including weight of container.....kilo..	3.10
1466	1501	Bellows, leather, for hand use, including weight of container.....kilo..	.40
1467	1502	Bellows, leather, for forges, gross weight.....kilo..	.05
1468	1488	Belts, any leather or skin, or covered with the same, for sabers, including weight of container.....kilo..	1.00
1469	1489	Belts, any leather, or covered with the same, with fringe of metal on silk, with silver-plated, gilt, or nickel-plated mountings, for sabers or small swords, including weight of container.....kilo..	8.00

SECTION TENTH.—ARTICLES OF LEATHER AND SKIN—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1470	1490	Belts, leather or partly leather, for hunters or travelers, including weight of container.....kilo..	1.00
1471	1499	Belts, machinery, leather or skin, not forming part of any particular machine, with or without pulleys or shafts, gross weight.....kilo..	.30
1472	1474	Boas, skin, fur or feathers, including weight of container, kilo.....	4.00
1473	1476	Boots and half boots, leather, all kinds, for men....pair..	4.00
1474	1477	Boots, leather, riding, all kinds.....pair..	6.00
1475	1510	Buckles, leather-covered, including weight of container, kilo.....	.50
1476	1465	Buckskins, all colors, including weight of container, kilo.....	.12
1477	1497	Cases, leather or skin, or covered with same, without metal ornaments, with or without appurtenances, including weight of container.....kilo..	2.00
1478	1498	Cases, leather or skin, or covered with same, with metal ornaments, with or without appurtenances, including weight of container.....kilo..	4.00
1479	1503	Cases, leather, for shotguns, including weight of container.....kilo..	1.00
1480	1505	Chamois skins, all colors, including weight of container, kilo.....	.12
1481	1487	Cigar cases, any leather or skin, or covered with the same, with or without metal ornaments, including weight of container.....kilo..	2.00
1482	1463	Cloaks (<i>abrigos</i>), fur, including weight of container.kilo..	3.00
1483	1491	Collars, leather, without metal ornaments, including weight of container.....kilo..	.50
1484	1492	Collars, leather, with metal ornaments, including weight of container.....kilo..	1.00
1485	1471	Cowhides, dressed, gross weight.....kilo..	.25
1486	1521	Cuffs and collars, skin, with fur or feathers, including weight of container.....kilo..	4.00
1487	1478	Gaiters and shoes, any kind of leather, or cloth not containing silk, with or without elastic, including weight of container.....kilo..	3.00
1488	1479	Gaiters and shoes, cloth of silk or containing silk, with or without elastic, including weight of container, kilo.....	6.00
1489	1506	Gloves, leather, fencing.....each..	1.00
1490	1507	Gloves, skin, embroidered or plain, unlined, including weight of container.....kilo..	4.50
1491	1508	Gloves, skin, embroidered or plain, lined, including weight of container.....kilo..	2.75
1492	1513	Game bags, leather, including weight of container.kilo..	1.00
1493	1511	Halters and martingales, leather, with or without other material, including weight of container.....kilo..	2.00

SECTION TENTH.—ARTICLES OF LEATHER AND SKIN—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1494	1509	Harnesses, leather, all kinds, with or without ornaments of metal and loose parts, for wagons and carriages, including weight of container kilo..	1.50
1495	1525	Hatbands, leather, all kinds, including weight of container kilo..	.25
1496	1480	Headstalls, any leather, with single or double reins and loose parts, with or without metal ornaments, including weight of container kilo..	2.00
1497	1496	Hides, without hair, unvarnished, not specified, including weight of container kilo..	.35
1498	1504	Holsters, leather, for pistols and revolvers, including weight of container kilo..	1.50
1499	1481	Kidskins, including weight of container kilo..	.12
1500	1518	Leggins, leather, all kinds, including weight of container, kilo..	3.00
1501	1500	Match boxes, leather, with or without metal ornaments, including weight of container kilo..	2.00
1502	1524	Morocco, including weight of container kilo..	.12
1503	1516	Parchment, in sheet, common size, including weight of container kilo..	1.00
1504	1494	Patent leather, all kinds, including weight of container, kilo..	.45
1505	1493	Patterns or legs, leather, for boots and shoes, whole size, not made up, including weight of container kilo..	2.00
1506	1495	Pigskins, including weight of container kilo..	.12
1507	1483	Pocketbooks, any leather or skin, or covered with the same, with or without appurtenances, including weight of container kilo..	2.00
1508	1519	Portemonnaies, leather, with or without metal ornaments, including weight of container kilo..	4.00
1509	1484	Portfolios, any leather or skin, or covered with the same, for keeping papers, including weight of container, kilo..	1.00
1510	1485	Portfolios, any leather or skin, or covered with same, including weight of container kilo..	1.00
1511	1522	Reins, leather, all kinds, including weight of container, kilo..	2.00
1512	1467	Rings, leather-covered, including weight of container, kilo..	.50
1513	1512	Saddles, all kinds, with or without metal ornaments and loose parts, including weight of container kilo..	2.00
1514	1482	Sandals (<i>cates</i>), sole leather, gross weight kilo..	.60
1515	1486	Shagreen, including weight of container kilo..	.12
1516	1526	Sheaths, leather, all kinds, with or without metal tips, including weight of container kilo..	1.00
1517	1470	Sheepskins, dressed, all kinds and colors, including weight of container kilo..	.12
1518	1517	Skins, tanned, with hair or feathers, with or without lining, including weight of container kilo..	2.00

SECTION TENTH.—ARTICLES OF LEATHER AND SKIN—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemalan tariff.		
			<i>Dollars.</i>
1519	1473	Skins, kip and calf, including weight of container..kilo..	.35
1520	1514	Slippers, leather, or cloth without silk, including weight of container.....kilo..	2.00
1521	1515	Slippers, leather, or cloth with silk, including weight of container.....kilo..	3.00
1522	1523	Sole leather, including weight of container.....kilo..	.12
1523	1466	Stirrup leathers, including weight of container ..kilo..	1.50
1524	1469	Straps, leather, for razors, including weight of container, kilo.....	1.00
1525	1520	Tips, leather, for billiard cues, including weight of container ..kilo.....	4.00
1526	1472	Trunks and valises, leather or leather-covered, without their appurtenances, with or without ornaments of metal, including weight of container.....kilo.....	1.00
1527	1527	Visors, leather, for caps of all kinds, including weight of container.....kilo.....	3.00

SECTION ELEVENTH.—GLASS, CROCKERY, AND EARTHENWARE.

			<i>Dollars.</i>
1528	1535	Articles of glass or crystal, not specified, including weight of container ..kilo.....	1.00
1529	1536	Articles of porcelain, crockery, or earthen, not specified, including weight of container.....kilo.....	.75
1530	1537	Articles of glass, crystal, porcelain, or crockery, not specified, with ornaments of skin, silk or material containing silk, with or without metal ornaments, including weight of container.....kilo.....	3.00
1531	1538	Balls, glass, hollow, all sizes, polished, for ornaments, with or without metal rings, gross weight.....kilo.....	.30
1532	1541	Bottles, earthen, gross weight.....kilo.....	.01
1533	1542	Bottles, glass, common, empty, for liquids, gross weight, kilo .....	.01
1534	1543	Bottles, glass, siphon, for aerated waters, with tin tops, gross weight.....kilo.....	.20
1535	1549	Boxes (cases), all kinds, crystal, glass, porcelain, or earthen, with or without ornaments of silk material, or of material containing silk, or of leather or metal, including weight of container.....kilo.....	2.00
1536	1546	Bracelets, crystal, glass, crockery, or porcelain, with or without metal ornaments, including weight of container ..kilo.....	1.00
1537	1578	Bricks and tiles, earthen or crockery, glazed or unglazed, for pavements (flooring), gross weight.....kilo.....	.01
1538	1596	Brooches (clasps), crystal, glass, crockery, or porcelain, all kinds, with or without metal ornaments, including weight of container.....kilo.....	1.00

SECTION ELEVENTH.—GLASS, CROCKERY, AND EARTHENWARE—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1539	1547	Busts, crystal, glass, crockery, porcelain, or earthen, weighing not more than 10 kilos each, gross weight, kilo	1.00
1540	1548	Busts, crystal, glass, crockery, porcelain, or earthen, weighing more than 10 kilos each, gross weight, kilo ..	.50
1541	1528	Bugles and beads, glass, all kinds, including weight of container .....	.40
1542	1544	Buttons, porcelain or crockery, all kinds, weight of cards included .....	.30
1543	1545	Buttons, glass or crystal, all kinds, weight of cards included .....	.40
1544	1550	Candelabra, crystal or glass, with or without foot of other material, including weight of container .....	.50
1545	1551	Candlesticks, crystal or glass, with or without foot of other material, including weight of container .....	.40
1546	1552	Candlesticks, crockery or porcelain, with or without foot of other material, including weight of container, kilo .....	.30
1547	1590	Candlesticks (<i>palmatorias</i>), glass, crockery, porcelain, or earthen, with or without metal ornaments, including weight of container .....	.50
1548	1533	Chandeliers, crystal, with metal fixtures, gross weight, kilo .....	.50
1549	1601	Chimneys for lamps and argand burners, all shapes and sizes, gross weight .....	.40
1550	1583	Crockery ware, ordinary, in pieces of all shapes and sizes, household use, gross weight .....	.10
1551	1584	Crockery ware, good quality or fine, in pieces of all shapes and sizes, for household use, gross weight, kilo ..	.20
1552	1585	Crockery ware, in jars, flowerpots, fruit dishes, and other like pieces, gross weight .....	.50
1553	1586	Crockery ware, in pieces of all shapes and sizes, with mountings or settings of metal, including weight of container	1.50
1554	1560	Crosses, crystal or glass, all kinds, including weight of container	1.00
1555	1556	Crystal or imitation of same, plain or figured, in pieces for household use, white or colored, gross weight kilo .....	.40
1556	1557	Crystal, or imitation of same, for spectacles and watches, including weight of container	1.00
1557	1558	Crystal or glass, in jars or flowerpots, including weight of container .....	.50
1558	1559	Crystal or glass, in pieces mounted or set in metal, including weight of container	3.00
1559	1576	Decanters, earthen, all kinds, with or without plates, gross weight .....	.20
1560	1561	Demijohns, common glass, with or without cover, gross weight .....	.02

SECTION ELEVENTH.—GLASS, CROCKERY, AND EARTHENWARE—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1561	1589	Eyes, artificial, glass or porcelain, including weight of container kilo..	4. 00
1562	1573	Flasks, crystal, of figured glass, empty, all sizes, gross weight kilo..	. 40
1563	1574	Flasks, glass, empty, covered with leather, cane, gutta-percha, cloth, or metal, including weight of container, kilo ..	1. 00
1564	1575	Flasks, glass, empty, common, all sizes, gross weight. kilo..	. 20
1565	1588	Flowerpots, glass, porcelain, or crockery, with or without artificial flowers, with or without ornaments of foot of other material. gross weight. kilo..	2. 00
1566	1571	Figures, statuettes (<i>figuras</i>), glass, crockery, porcelain or earthen, not weighing more than 10 kilos each, gross weight kilo..	1. 00
1567	1572	Figures or statuettes (<i>figuras</i>), glass, crockery, porcelain or earthen, weighing more than 10 kilos each, gross weight kilo..	. 50
1568	1563	Furnels, crystal or glass, including weight of container, kilo ..	. 40
1569	1603	Glass, common, in pieces for household use, white or colored, gross weight kilo..	. 20
1570	1604	Glasses, sensitive, for photography, including weight of container kilo..	. 20
1571	1540	Globes (<i>bombas</i>), glass, all kinds, with or without stands, net weight kilo..	. 40
1572	1577	Globes, screens, and shades, crystal or glass, for lamps or candlesticks, plain or figured, all shapes and sizes, gross weight kilo..	. 50
1573	1579	Lamps, crystal or glass, except such as are intended for scientific purposes, with or without metal attachments, gross weight kilo..	. 60
1574	1580	Lamps, crockery or porcelain, with or without metal attachments, gross weight kilo..	. 60
1575	1597	Lamps (<i>quinques</i>), glass, crockery, or porcelain, all kinds, with or without foot of other material, gross weight kilo..	. 60
1576	1570	Lanterns, crystal or glass, all kinds, gross weight. kilo..	. 60
1577	1582	Lanterns, crystal, all kinds, with or without attachments, including weight of container kilo..	. 60
1578	1581	Lenses, crystal, all kinds and sizes, with or without metal or other mountings, including weight of container kilo..	4. 00
1579	1539	Marbles, glass, stone, paste, or composition, small, for children's games, including weight of container. kilo..	. 30
1580	1566	Mirrors, with wooden or composition frames, all sizes, gilt, silvered, bronzed, varnished, or painted, gross weight kilo..	. 50
1581	1567	Mirrors, with brass, zinc, tin, or white metal frames, all sizes, with or without advertisements, gross weight, kilo ..	. 50

SECTION ELEVENTH.—GLASS, CROCKERY, AND EARTHENWARE—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
1582	1568	Mirrors, with frames of cloth of silk or containing silk, skin, or crystal, and those with ornaments of artificial flowers or feathers, up to 50 centimeters square, including frame, including weight of container...kilo..	1.00
1583	1569	Mirrors, with frames of cloth wholly or partly of silk, skin, or crystal, and those with ornaments of artificial flowers or feathers, more than 50 centimeters square, gross weight .....kilo..	.75
1584	1587	Mirror plates, with tin or silver foil, gross weight...kilo..	.50
1585	1530	Mortars (<i>almireces</i> and <i>morteros</i>), crockery, glass, or marble, with or without pestles, gross weight...kilo..	.20
1586	1554	Necklaces, crystal or glass, including weight of container .....kilo..	1.00
1587	1532	Opera, field, or marine glasses, all kinds, with or without cases, including weight of container.....kilo..	8.00
1588	1529	Ornaments (<i>aderezos</i>), glass or crockery, all kinds, with or without metal ornaments, including weight of container .....kilo..	1.00
1589	1592	Pearls, imitation, glass, paste, or composition, polished, all sizes, including weight of container.....kilo..	2.00
1590	1534	Pendants, earrings, glass, crockery, or porcelain, with metal settings, including weight of container...kilo..	1.00
1591	1591	Pendants or hangings, crystal or glass, for chandeliers or other uses, white or colored, including weight of container .....kilo..	.50
1592	1553	Piping (<i>canutillo</i>), glass, polished, including weight of container .....kilo..	.60
1593	1593	Porcelain, real or imitation, in pieces of all shapes and sizes, for household use, gross weight .....kilo..	.30
1594	1594	Porcelain, real or imitation, in jars, flower pots, fruit dishes, and other like pieces, gross weight.....kilo..	1.00
1595	1595	Porcelain, real or imitation, in pieces of all sizes and shapes, with mountings or settings of metal, gross weight .....kilo..	2.00
1596	1598	Reflectors, crystal or glass, with or without metal mountings, including weight of container .....kilo..	.60
1597	1599	Rosaries of glass, crockery, or porcelain beads, including weight of container.....kilo..	.50
1598	1531	Spectacles, glass or crystal, all kinds, mounted with common metal, horn, gutta-percha, or composition, with or without case, including weight of container...kilo..	4.00
1599	1564	Spittoons, crystal or glass, white or colored, including weight of container.....kilo..	.35
1600	1565	Spittoons, crockery or porcelain, all kinds, gross weight, kilo .....kilo..	.25
1601	1562	Teeth, artificial, porcelain, all kinds, including weight of container .....kilo..	4.00
1602	1600	Tubes, cylindrical, crystal or glass, for machinery, including weight of container.....kilo..	.20

SECTION ELEVENTH.—GLASS, CROCKERY, AND EARTHENWARE—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1603	1602	Urns, crystal or glass, with or without metal ornaments, gross weight.....kilo..	.50
1604	1555	Wreaths, garlands, or crosses, glass or porcelain, for orna- ments of tombs or other uses, including weight of con- tainer .....kilo..	.50

SECTION TWELFTH.—MISCELLANEOUS ARTICLES.

			<i>Dollars.</i>
1605	1609	Accordions, all kinds, including weight of container, kilo .....	.30
1606	1620	Albums, with cover of velvet, tortoise shell, shell, ivory, gutta-percha, wood, celluloid, or metal, with or with- out photographs or attachments of other material, including weight of container .....kilo..	3.00
1607	1625	Apparatus, gymnastic, including weight of container, kilo .....	.10
1608	1626	Apparatus, soda-water, common metal, not specified, gross weight .....kilo..	.20
1609	1627	Apparatus, all kinds, for the reproduction of manuscript, gross weight.....kilo..	.30
1610	1738	Aprons, rubber or rubber-cloth, including weight of con- tainer .....kilo..	2.00
1611	1635	Articles of alabaster or marble, not specified, including weight of container.....kilo..	.30
1612	1636	Articles of jet or imitation, not specified, including weight of container .....kilo..	2.00
1613	1637	Articles of whalebone, not specified, including weight of container .....kilo..	.50
1614	1638	Articles not specified, of rattan, osier, or straw, with cloth wholly or partly silk, or with skin, with or without metal ornaments, including weight of container..kilo..	1.50
1615	1639	Articles of shells, including weight of container ..kilo..	1.00
1616	1640	Articles of tortoise shell, mother-of-pearl, or ivory, not specified, including weight of container .....kilo..	5.00
1617	1641	Articles of aluminium, not specified, including weight of container .....kilo..	4.00
1618	1642	Articles not specified, of bone, gutta-percha, celluloid, hair, hard rubber, including weight of container.kilo..	1.00
1619	1643	Articles of paste, with wooden sheets in imitation of carving, including weight of container.....kilo..	.30
1620	1644	Articles of jasper or agate, not specified, including weight of container.....kilo..	3.00
1621	1645	Articles or manufactures of rubber or gum elastic, not specified, including weight of container.....kilo..	2.00
1622	1646	Articles or manufactures of human hair, real or imitation, with or without metal or other ornaments, including weight of container .....kilo..	10.00

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
1623	1647	Articles of gypsum or stucco, not specified, gross weight, kilo .....	.20
1624	1660	Balls, billiard, gutta-percha, celluloid, or composition, including weight of container	2.00
1625	1661	Balls, billiard, ivory, including weight of container	5.00
1626	1650	Bandores, with or without case, including weight of container	2.00
1627	1682	Baskets large and small, wicker or reed, all kinds and shapes, with or without ornaments of other material, including weight of container	1.00
1628	1683	Baskets, large and small, wicker or reed, all kinds and shapes, with ornaments of other material, including weight of container	1.50
1629	1684	Baskets, traveling, with articles for table or bath, including weight of container	1.00
1630	1685	Baskets, small, tortoise shell, mother of pearl, ivory, or imitation of these, with or without ornaments of other material, including weight of container	5.00
1631	1761	Bassoons (<i>fagotes</i>), including weight of container	1.50
1632	1708	Belts, all kinds, not specified, with or without buckles not gold or silver, including weight of container	2.00
1633	1834	Birds, prepared for ornaments for hats, including weight of container	3.00
1634	1655	Blacking or varnish, liquid or solid, for boots and shoes and harness, gross weight .....	.20
1635	1777	Blocks and frames, all kinds, for hats .....	.50
1636	1657	Boas, feather, including weight of container	4.00
1637	1808	Books of imitation gold or silver leaf, for gilding, including weight of paper	4.00
1638	1809	Books of fine gold or silver, for gilding, including weight of paper	16.00
1639	1664	Boots, half-boots, and overboots, rubber or rubber-cloth, including weight of container	2.00
1640	1677	Boxes, empty, tortoise-shell, shell, mother-of-pearl, ivory, or imitations of these, with or without ornaments of other material, including weight of container	5.00
1641	1675	Boxes (cases), rattan or straw, with cloth wholly or partly silk, or with skin, with or without metal ornaments, including weight of container	1.50
1642	1678	Boxes, empty, bone, rubber, or horn, with or without ornaments of other materials, including weight of container	1.00
1643	1679	Boxes, music, with metal cylinders and teeth, including weight of container	1.00
1644	1680	Boxes of paints or colors, with or without oil, all kinds, including weight of container	1.00
1645	1770	Braids or fringe (<i>flecos</i>), silver, gilt or ungilt, including weight of container	12.00

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1646	1702	Bristles, shoemakers', including weight of container, kilo .....	.10
1647	1703	Bristles, horsehair, or imitation, gross weight..... kilo..	.05
1648	1748	Brooms, large and small, all kinds, with or without handle, gross weight..... kilo..	.25
1649	1668	Brushes, shaving, all kinds, including weight of container..... kilo..	2.00
1650	1669	Brushes, paint, all kinds, including weight of container, kilo .....	.25
1651	1692	Brushes, tooth, nail, shaving, dusting, hair, clothes, table, hat, set in wood, bone, or horn, including weight of container..... kilo..	1.00
1652	1693	Brushes, the foregoing kinds, in ivory, mother-of-pearl, tortoise shell, or imitations of these, with or without ornaments of other material, or case, including weight of container..... kilo..	4.00
1653	1694	Brushes, wire, for the hair, all kinds, including weight of container..... kilo..	2.00
1654	1695	Brushes, automatic, for cleaning carpets, with or without handles, including weight of container..... kilo..	1.00
1655	1696	Brushes, root, common kind, for floors and other uses, including weight of container..... kilo..	.30
1656	1697	Brushes, horse, bristles, root or imitation, including weight of container..... kilo..	.50
1657	1853	Brushes (<i>pinceles</i>), hair, all kinds and sizes, including weight of container..... kilo..	4.00
1658	1710	Bugles, military, including weight of container..... kilo..	1.00
1659	1671	Busts, plaster of Paris, with or without pedestals of other materials, gross weight..... kilo..	.20
1660	1670	Busts, marble or alabaster, with or without pedestals of other material, gross weight..... kilo..	.30
1661	1665	Buttons, jet or imitation, with or without metal part, including weight of container..... kilo..	2.00
1662	1666	Buttons, tortoise shell, mother-of-pearl, or ivory, or imitations of these, with or without metal part, including weight of container..... kilo..	2.00
1663	1667	Buttons, celluloid, vegetable ivory, gutta-percha, bone, horn, or paste, with or without metal part, including weight of container..... kilo..	.50
1664	1673	Cables, pita, hemp, and other vegetable fibers, all sizes not for use in the ports of the Republic, gross weight, kilo .....	.10
1665	1903	Candles, tallow, gross weight..... kilo..	.10
1666	1651	Canes, whalebone, including weight of container..... kilo..	2.00
1667	1652	Canes, all kinds, with hilts, of gold, silver, or platinum, including weight of container..... kilo..	5.00
1668	1653	Canes, leather, gutta-percha, or other material not specified with or without sword or iron cover, including weight of container..... kilo..	1.50

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1669	1811	Canvas, painters', prepared, including weight of container.....kilo..	.50
1670	1674	Caps, all kinds, not specified, with or without visors, including weight of container.....each..	.50
1671	1888	Card cases, ivory, mother-of-pearl, or tortoise shell, with or without covering, including weight of container, kilo.....	5.00
1672	1889	Card cases, all kinds, not specified, with or without covering, including weight of container.....kilo..	2.50
1673	1760	Cases, jewel, all kinds, including weight of container, kilo.....	5.00
1674	1897	Chalk, for billiard cues, including weight of container, kilo.....	2.00
1675	1732	<i>Chapupo</i> , net weight.....kilo..	.20
1676	1618	Chess games, bone, including weight of container.....kilo..	2.00
1677	1619	Chess games, mother-of-pearl or ivory, including weight of container.....kilo..	8.00
1678	1676	Chests, carpenters', with tools, gross weight.....kilo..	.30
1679	1662	Cigar holders and pipes, meerschaum or imitation, with or without case, including weight of container.....kilo..	8.00
1680	1663	Cigar holders, all kinds, not specified, including weight of container.....kilo..	4.00
1681	1704	Cigar cases, reed or straw, rubber, composition, or other material, not specified, including weight of container, kilo.....	2.00
1682	1705	Cigar cases, metal, ivory, mother-of-pearl, tortoise shell, or imitations of these, including weight of container, kilo.....	5.00
1683	1706	Cigars, all tobacco, gross weight.....kilo..	6.50
1684	1707	Cigarettes, paper of leaf, gross weight.....kilo..	6.50
1685	1709	Citharas, all kinds, with or without case, including weight of container.....kilo..	2.00
1686	1711	Clarinets, all kinds, including weight of container, kilo.....	1.50
1687	1687	Cloaks and coats, rubber, or rubber cloth, with or without hood and leggings, including weight of container, kilo.....	2.00
1688	1891	Cloth, ordinary, tarred or waxed, for packing, gross weight.....kilo..	.05
1689	1892	Cloth, prepared with India rubber, for dresses, including weight of container.....kilo..	2.00
1690	1893	Cloth, hair, pure or mixed, including weight of container.....kilo..	.50
1691	1894	Cloth, painted, for artificial flowers, including weight of container.....kilo..	1.00
1692	1717	Color, prepared, for the skin, including weight of container.....kilo..	1.00
1693	1729	Collars and cuffs, celluloid, with or without cloth inside, including weight of container.....kilo..	4.00

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1694	1839	Combs and braid-combs, ivory, mother-of-pearl, or tortoise shell, with or without ornaments of other material, including weight of container.....kilo..	5.00
1695	1840	Combs, and braid-combs, all kinds not specified, with or without ornaments of other material.....kilo..	1.00
1696	1720	Cords (string), hemp, jute, and the like, gross weight, kilo.....	.30
1697	1721	Cords, elastic, for hats and other uses, including weight of container.....kilo..	3.00
1698	1722	Cord, silver, gilt or ungilt, with or without inside of other material, including weight of container....kilo..	10.00
1699	1723	Cornets and bass horns, all kinds, with or without case, including weight of container.....kilo..	1.00
1700	1858	Cornets-a-piston, with or without case, including weight of container.....kilo..	1.00
1701	1719	Coral, wrought, polished, or cut into beads, including weight of container.....kilo..	2.00
1702	1724	Cosmetics, toilet, all kinds, including weight of container.....kilo..	1.00
1703	1764	Counters, for games, ivory, mother-of-pearl, tortoise shell, or imitations of these, including weight of container.....kilo..	5.00
1704	1765	Counters, all kinds not specified, including weight of container.....kilo..	1.00
1705	1784	Crates, common, gross weight.....kilo..	.25
1706	1785	Crates, fine, gross weight.....kilo..	.40
1707	1726	Creams, toilet, including weight of container.....kilo..	1.00
1708	1713	Cushions, rubber, including weight of container....kilo..	2.00
1709	1861	Cymbals, metal, including weight of container....kilo..	1.00
1710	1739	Dentifrices, liquid or solid, including weight of container, kilo.....	1.00
1711	1741	Diamonds, glaziers', real or imitation, set in handle, including weight of container.....kilo..	2.00
1712	1735	Dice, shell, mother-of-pearl or ivory, including weight of container.....kilo..	10.00
1713	1736	Dice, bone, or other material not specified, including weight of container.....kilo..	5.00
1714	1743	Disks, leather or felt, for polishing, including weight of container.....kilo..	.25
1715	1826	Dolls, all kinds, undressed, including weight of container, kilo.....	.75
1716	1827	Dolls, all kinds, dressed, including weight of container, kilo.....	1.50
1717	1828	Dolls, automatic, winding, including weight of container.....kilo..	2.00
1718	1896	Dyes, hair, including weight of container.....kilo..	2.00
1719	1629	Eardrops, tortoise shell, shell or ivory, including weight of container.....kilo..	3.00

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1720	1628	Eardrops, jet or imitation, including weight of container.....kilo..	2.00
1721	1630	Eardrops, horn, celluloid, gutta-percha, bone, or wood, with or without metal ornaments, including weight of container.....kilo..	1.00
1722	1752	Edging, silver, gilt or ungilt, including weight of container.....kilo..	10.00
1723	1744	Elastic, all kinds, for boots and shoes, including weight of container.....kilo..	1.00
1724	1749	Essences and extracts, toilet, including weight of container.....kilo..	1.00
1725	1605	Fans, tortoise shell or ivory.....each..	3.00
1726	1606	Fans, with ribs of horn, celluloid, or bone, including weight of container.....kilo..	3.00
1727	1862	Feathers and down, for pillows, including weight of container.....kilo..	2.00
1728	1864	Feathers, all kinds, for ornaments, including weight of container.....kilo..	10.00
1729	1865	Feather brushes, dusting, and their parts, including weight of container.....kilo..	.50
1730	1766	Figures, or statuettes (<i>figuras</i>), marble or alabaster, with or without pedestals of other material, including weight of container.....kilo..	.30
1731	1767	Figures or statuettes (<i>figuras</i>), wax, with or without ornaments of other material, including weight of container, kilo.....	1.00
1732	1768	Figures or statuettes (<i>figuras</i>), plaster of Paris, paste, or composition, with or without pedestal of other material, including weight of container.....kilo..	.50
1733	1782	Fireworks, all kinds, gross weight.....kilo..	.50
1734	1850	Flints, gross weight.....kilo..	.05
1735	1771	Flowers, artificial, porcelain, crockery, glass, or composition, mounted or unmounted, including weight of container.....kilo..	.50
1736	1772	Flowers, artificial, wax, mounted or unmounted, including weight of container.....kilo..	1.50
1737	1773	Flowers, artificial, cloth, without silk, mounted, including weight of container.....kilo..	4.00
1738	1774	Flowers, artificial, cloth, without silk, unmounted, including weight of container.....kilo..	2.00
1739	1775	Flowers, artificial, cloth, wholly or partly silk, mounted, including weight of container.....kilo..	8.00
1740	1776	Flowers, artificial, cloth, wholly or partly silk, unmounted, including weight of container.....kilo..	4.00
1741	1813	Flue-brushes, hair or other material, including weight of container.....kilo..	.50
1742	1769	Flutes, all kinds, with or without case, including weight of container.....kilo..	2.00
1743	1631	Frames, umbrella or parasol, gross weight.....kilo..	1.00

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1744	1747	Frostwork, silver, gilt or ungilt, including weight of container kilo..	10.00
1745	1783	Galloon, silver, gilt or ungilt, including weight of container kilo..	12.00
1746	1607	Glove-buttoners, including weight of container... kilo..	1.00
1747	1714	Glue, carpenter's, gross weight kilo..	.25
1748	1715	Glue, fish, including weight of container kilo..	.80
1749	1833	Gold, any fineness, manufactured in any kind of articles not specified, net weight..... kilo..	50.00
1750	1797	Gourds, gross weight..... kilo..	50
1751	1824	Grindstones, whetstones, or hones, all kinds, with or without cranks or mountings of other material, gross weight..... kilo..	.10
1752	1786	Guitars, large and small, all kinds, with or without case, including weight of container kilo..	2.00
1753	1672	Hair, human and imitation thereof, unmanufactured, including weight of container kilo..	2.50
1754	1841	Hair, goat, camel, cat, dog, seal, and cow, net weight..... kilo..	.10
1755	1842	Hair, beaver, including weight of container..... kilo..	1.00
1756	1843	Hair, ragondin, vicugna, rabbit, hare, alpaca, angora goat, and the like, including weight of container kilo..	.20
1757	1788	Hair pins, ivory, mother-of-pearl, tortoise-shell, real or imitation, including weight of container kilo..	5.00
1758	1874	Handles for canes, silver or platinum of any fineness, including weight of container kilo..	50.00
1759	1905	Harmonicas, all kinds, gross weight kilo..	.60
1760	1633	Harmoniums, all kinds, gross weight..... kilo..	.60
1761	1634	Harps, all kinds, gross weight kilo..	1.00
1762	1882	Hats, straw or imitation, all kinds and sizes, without ornaments, including weight of container kilo..	5.00
1763	1883	Hats, straw or imitation, all kinds and sizes, with ornaments, including weight of container..... kilo..	10.00
1764	1884	Hats, rush or Panama, all sizes and qualities..... each	1.00
1765	1885	Hats, all kinds and sizes, not specified, with ornaments, including weight of container kilo..	15.00
1766	1830	Hautboys, with or without case, including weight of container..... kilo..	1.50
1767	1690	Hoods or hat-linings, rubber or oilcloth, including weight of container..... kilo..	2.00
1768	1816	Hops, gross weight..... kilo..	.30
1769	1900	Horns (<i>trompas</i>) musical instruments, including weight of container kilo..	1.00
1770	1792	Instruments, musical, all kinds and materials, and repairs for same, not specified, including weight of container or case kilo..	2.00
1771	1617	Insulators, crystal or glass, for pianos, including weight of container kilo..	.30
1772	1798	Jewelry, gold or platinum, of any fineness, with pearls or precious stones, net weight..... kilo..	150.00

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles.	Duty, <i>Dollars.</i>
English trans- lation.	Guatemala- lan tariff.		
1773	1799	Jewelry, silver and gold, silver, or steel, of any fineness, with pearls or precious stones, net weight kilo..	50.00
1774	1800	Jewelry, gold or platinum, of any fineness, without pearl or precious stones, net weight kilo..	50.00
1775	1801	Jewelry, silver and gold, silver or steel, of any fineness, without pearls or precious stones, net weight kilo..	10.00
1776	1873	Jewelry, imitation, not specified, including weight of container kilo..	2.00
1777	1658	Keyhole guards, tortoise shell, ivory, or mother-of-pearl, including weight of container kilo..	2.00
1778	1659	Keyhole guards, gutta-percha, celluloid, or bone, including weight of container kilo..	1.00
1779	1890	Keys, piano, ivory or imitation, in sheet, including weight of container kilo..	2.00
1780	1829	Knives, clasp or pen, handle of gold, silver, or platinum, of any fineness, net weight kilo..	25.00
1781	1762	Lamps, carriage, including weight of container kilo..	1.00
1782	1763	Lanterns, all kinds, not specified, gross weight kilo..	.50
1783	1815	Lights, Bengal, gross weight kilo..	.50
1784	1810	Liquor cases, all kinds, including weight of container, kilo ..	4.00
1785	1851	Lithograph stones, gross weight kilo..	.05
1786	1814	Lyres, all kinds, with or without case, including weight of container kilo..	1.00
1787	1818	Mannikins, all kinds, not specified, for modistes or showing dresses, including weight of container kilo..	.20
1788	1819	Marble, in the rough, in sawed slabs, unpolished, or in dust, gross weight kilo..	.01
1789	1820	Marble, polished, in slabs, for furniture, those with molded or polished edges, gross weight kilo..	.15
1790	1821	Marble, polished, in pieces for buildings or tombs, gross weight kilo..	.05
1791	1822	Marble, in gravestones, gross weight kilo..	2.00
1792	1778	Match boxes, ivory, mother-of-pearl, tortoise shell, or imitations of these, including weight of container kilo..	5.00
1793	1779	Match boxes, all kinds not specified, including weight of container kilo..	2.00
1794	1780	Matches, wax, gross weight kilo..	.20
1795	1781	Matches, with colored lights, gross weight kilo..	.50
1796	1648	Mats, oilcloth, all kinds, for bottles or dishes, including weight of container kilo..	1.00
1797	1758	Mats, hemp, coco, jute, palm, or heniquen, gross weight, kilo ..	.30
1798	1759	Mats, Chinese cane, or imitation, gross weight kilo..	.40
1799	1845	Mats, bed, common, gross weight kilo..	.10
1800	1846	Mats, bed, fine, gross weight kilo..	.20
1801	1716	Mattresses, rubber, including weight of container kilo..	2.00
1802	1823	Measures (rules), longitudinal, ivory, including weight of container kilo..	2.50

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1803	1632	Mouth organs, all kinds, gross weight .....kilo..	1.00
1804	1718	Necklaces, ladies', all kinds, not specified, including weight of container.....kilo..	2.00
1805	1745	Oilcloth or rubber cloth, for table covers and other pur- poses, not specified, gross weight.....kilo..	.50
1806	1746	Oilcloth for floors, gross weight.....kilo..	.20
1807	1608	Oils, perfumed, for toilet, including weight of container, kilo.....	1.00
1808	1832	Organs, all kinds and sizes, and repairs for same, gross weight.....kilo..	.50
1809	1610	Ornaments (<i>aderezos</i>), jet or imitation, including weight of container.....kilo..	2.00
1810	1611	Ornaments (<i>aderezos</i>), tortoise shell, or ivory, including weight of container.....kilo..	3.00
1811	1612	Ornaments (<i>aderezos</i>), horn, celluloid, gutta-percha, bone, or wood, with or without metal ornaments, including weight of container.....kilo..	1.00
1812	1613	Ornaments (<i>adornos</i>), feather, including weight of con- tainer.....kilo..	4.00
1813	1614	Ornaments (<i>adornos</i>), metallic artificial flowers, for the head, including weight of container.....kilo..	4.00
1814	1615	Ornaments (<i>adornos</i>), straw, including weight of con- tainer.....kilo..	.50
1815	1854	Paints, in powder, not specified, gross weight.....kilo..	.08
1816	1855	Paints, common, in oil or rubber preparation, gross weight.....kilo..	.12
1817	1856	Paints, fine, not in oil, prepared in small cakes or metal tubes, including weight of container.....kilo..	1.00
1818	1857	Paints, fine, in oil, for the trades, including weight of con- tainer.....kilo..	1.00
1819	1836	Paraffin in cakes, gross weight.....kilo..	.30
1820	1837	Paraffin in candles, gross weight.....kilo..	.40
1821	1852	Parts, loose, for watch repairs, including weight of con- tainer.....kilo..	.10
1822	1838	Pastes, toilet, perfumed, including weight of container, kilo.....	1.00
1823	1807	Pencil cases and penholders, gold, silver, or platinum of any fineness, with or without ornaments of other ma- terial, net weight.....kilo..	50.00
1824	1863	Pens, gold or silver, including weight of container.....kilo..	50.00
1825	1844	Perfumery, all kinds not specified, including weight of container.....kilo..	1.00
1826	1848	Pianos, all kinds and sizes, set up or not, with or without crank or winding apparatus, and loose parts or repairs, gross weight.....kilo..	.50
1827	1849	Picolos, with or without case, including weight of con- tainer.....kilo..	2.00
1828	1869	Pomades, toilet, including weight of container.....kilo..	1.00

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1829	1870	Ponchos, rubber or rubber cloth, including weight of container.....kilo..	2.00
1830	1871	Portemonnaies, ivory, mother-of-pearl, or tortoise shell, including weight of container.....kilo..	5.00
1831	1872	Portemonnaies of other materials not specified, including weight of container.....kilo..	1.50
1832	1866	Powders, toilet, with or without puffs, including weight of container.....kilo..	3.00
1833	1867	Powders, bronzing, or those prepared with varnish, including weight of container.....kilo..	1.00
1834	1868	Powder flasks and shot bags, of materials not specified, including weight of container.....kilo..	1.00
1835	1825	Puffs, for toilet powders, all kinds, including weight of container.....kilo..	4.00
1836	1804	Rattan, rushes, straw or palm-leaf, for furniture or hats, gross weight.....kilo..	.10
1837	1740	Reels, ivory, mother-of-pearl, tortoise shell, or imitations of these, including weight of container....kilo..	5.00
1838	1623	Rings, napkin, bone, horn, rubber, or composition, including weight of container.....kilo..	1.00
1839	1624	Rings, napkin, ivory, mother-of-pearl, and tortoise shell, including weight of container.....kilo..	4.00
1840	1712	Rockets and firecrackers, all kinds, gross weight.....kilo..	.50
1841	1686	Rods, fishing, with or without attachments, including weight of container.....kilo..	.50
1842	1880	Rosaries, all kinds not specified, without ornaments of gold, silver, or platinum, including weight of container, kilo.....	2.00
1843	1881	Rosaries, all kinds, with chasings or ornaments of gold, silver, or platinum, including weight of container. kilo..	10.00
1844	1847	Rosin, prepared for violin-bows, etc., including weight of container.....kilo..	.50
1845	1789	Rubber, in sheets, for the trades, including weight of container.....kilo..	2.50
1846	1790	Rubber, in strips, for billiard cushions, including weight of container.....kilo..	1.50
1847	1791	Rubber and gutta-percha, prepared, for dentists, including weight of container.....kilo..	3.00
1848	1622	Sachets, perfume, including weight of container.....kilo..	1.00
1849	1787	Sheets of ivory, mother-of-pearl, tortoise shell, real or imitation, including weight of container.....kilo..	2.50
1850	1691	Shells, cartridge, for shotguns, gross weight.....kilo..	.50
1851	1908	Shoes, rubber or gum elastic, all kinds, including weight of container.....kilo..	2.00
1852	1681	Shoe horns, all kinds, including weight of container. kilo..	1.00
1853	1860	Silver, any fineness, manufactured in any article not specified, net weight.....kilo..	10.00
1854	1859	Slates for billiard tables, gross weight.....kilo..	.15
1855	1835	Slippers, straw or China rushes, including weight of container.....kilo..	1.00

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1856	1875	Snuff, gross weight kilo..	6.50
1857	1793	Soap, common, in bars or balls, for washing clothes and other uses, gross weight kilo..	.15
1858	1794	Soap, all kinds, in cakes, powdered, or liquid, unscented, including weight of container kilo..	.50
1859	1795	Soap, all kinds, in cakes, powdered, or liquid, scented, including weight of container kilo..	1.00
1860	1796	Soapstone, for tailors, including weight of container, kilo kilo..	1.00
1861	1750	Spermaceti, in cakes, gross weight kilo..	.25
1862	1751	Spermaceti, in candles, gross weight kilo..	.30
1863	1753	Sponges, all kinds, except when otherwise specified, in- cluding weight of container kilo..	6.00
1864	1727	Spoons and forks, ivory, shell, tortoise shell, or imita- tions of these, with or without cases, including weight of container kilo..	5.00
1865	1728	Spoons, small, ivory, shell, tortoise shell, and imitations of these, including weight of container kilo..	5.00
1866	1621	Starch, common, in cake or powder, gross weight kilo..	.08
1867	1754	Statues, marble or alabaster, with or without pedestal of other material, weighing not more than 10 kilos each, gross weight kilo..	.30
1868	1755	Statues, marble or alabaster, with or without pedestal of other material, weighing from 10 to 50 kilos each, gross weight kilo..	.20
1869	1756	Statues, marble or alabaster, with or without pedestal of other material, weighing more than 50 kilos each, gross weight kilo..	.05
1870	1757	Stearin, in candles, gross weight kilo..	.15
1871	1730	Strings, bass, for musical instruments, including weight of container kilo..	2.00
1872	1731	Strings, for musical instruments, hemp, gut, or tendon, including weight of container kilo..	3.00
1873	1742	Teeth, artificial, all kinds, not specified, including weight of container kilo..	4.00
1874	1895	Tents, field, all kinds, with or without appurtenances, gross weight kilo..	.05
1875	1737	Thimbles, shell, mother-of-pearl, ivory, or imitations of these, all kinds, including weight of container kilo..	5.00
1876	1805	Tiles, flooring, mosaic, gross weight kilo..	.03
1877	1806	Tiles, marble or alabaster, dressed on one side, gross weight kilo..	.03
1878	1907	Tinder, for smokers, including weight of container kilo..	1.30
1879	1886	Tobacco, chewing, gross weight kilo..	6.50
1880	1887	Tobacco, smoking, for pipes, gross weight kilo..	6.50
1881	1831	Tooth pastes, including weight of container kilo..	1.00
1882	1812	Toothpicks, all kinds, including weight of container, kilo kilo..	.50
1883	1616	Toothwashes, Botot's, quinine, and the like, including weight of container kilo..	1.00

SECTION TWELFTH.—MISCELLANEOUS ARTICLES—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1884	1688	Tops, carriage (<i>capacetes</i>), rubber or rubber cloth, lined with cotton or woolen, with or without frame, gross weight kilo..	.60
1885	1802	Toys, all kinds, including weight of container kilo..	1.00
1886	1803	Toys, automatic, all kinds, not specified, including weight of container kilo..	2.00
1887	1898	Transparencies, painted cloth, including weight of container kilo..	.60
1888	1899	Trombones, including weight of container kilo..	1.00
1889	1901	Trumpets, small, including weight of container kilo..	1.00
1890	1654	Trunks and valises of materials not specified, without their appurtenances, including weight of container, kilo .....	.75
1891	1817	Valises and hand bags, traveling, all kinds, including weight of container kilo..	1.50
1892	1902	Vaseline, for toilet use, including weight of container, kilo	1.00
1893	1904	Velocipedes, all kinds and shapes, gross weight kilo..	.30
1894	1906	Viols, violins, and violoncellos, with or without case, including weight of container kilo..	2.00
1895	1876	Watches, repeating, gold or gold plated, any fineness, with or without precious stones each..	14.00
1896	1877	Watches, not repeating, gold or gold plated, any fineness, with or without precious stones each..	7.00
1897	1878	Watches, repeating, silver, of any fineness, or other material except gold each..	5.00
1898	1879	Watches, not repeating, silver, of any fineness, or other material except gold each..	1.00
1899	1689	Waterproofs, cotton oilcloth, including weight of container kilo..	1.00
1900	1698	Wax, bees, pure or mixed, white, brown, or virgin, gross weight kilo..	.60
1901	1699	Wax, mineral or cerecine, gross weight kilo..	.30
1902	1700	Wax, vegetable, gross weight kilo..	.50
1903	1701	Wax, in candles, gross weight kilo..	1.20
1904	1649	Whalebone, or imitation of same, including weight of container kilo..	.75
1905	1733	Whips, rawhide, or lashes, with metal handles or ornaments, including weight of container kilo..	3.00
1906	1734	Whips, rawhide, or lashes, without metal handles or ornaments, including weight of container kilo..	2.00
1907	1656	White, liquid, for toilet, including weight of container, kilo	1.00
1908	1725	Workboxes, all kinds, with or without implements, including weight of container kilo..	3.00

SECTION THIRTEENTH.—STATIONERY, PASTEBOARD, AND OFFICE ARTICLES.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
1909	1911	Albums, paper or pasteboard, without ornaments of other materials, with or without photographs, including weight of container kilo..	1. 50
1910	1913	Articles, not specified, of paper or pasteboard, without ornaments of other materials, including weight of container kilo..	. 50
1911	1914	Articles, not specified, of paper or pasteboard, covered or lined wholly or partly with silk or cloth containing silk, or with skin, with or without metal ornaments, including weight of container kilo..	2. 00
1912	1917	Bags, paper, for retail trade, gross weight kilo..	. 20
1913	1951	Balloons, paper, all kinds, including weight of container kilo..	. 50
1914	1994	Bindings, leather or muslin, all kinds, for books, including weight of container kilo..	. 25
1915	1939	Blanks, engraved, printed, or lithographed, including weight of container kilo..	1. 00
1916	2006	Boards, chess or draughts, paper or pasteboard, including weight of container kilo..	1. 00
1917	1934	Books, writing, drawing, ciphering, for school use, including weight of container kilo..	. 10
1918	1961	Books, blank or ruled, with cover of pasteboard, leather, or muslin, with or without corner pieces or clasps of metal, including weight of container kilo..	. 60
1919	1962	Books, printed, bound in pasteboard, leather, or muslin, with or without corner pieces or clasps of metal, gross weight kilo..	. 10
1920	1963	Books, bound in velvet, shell, ivory, tortoise, gutta-percha, wood, celluloid, metal, or other like materials, with or without cases, including weight of container—kilo..	3. 00
1921	1964	Books, music, printed or manuscript, bound in pasteboard, leather, or muslin, with or without corner pieces or clasps of metal, including weight of container . kilo..	. 10
1922	1965	Books, small, of cigarette papers, including weight of container kilo..	. 50
1923	1920	Boxes, small, empty, of pasteboard, put together or not, for matches, tapers, pharmaceutical preparations, and other uses, without ornaments, including weight of container kilo..	. 20
1924	1921	Boxes, large or medium, empty, of pasteboard, put together or not, without ornaments or linings of silk, skin, or metal, including weight of container . . . kilo..	2. 00
1925	1922	Boxes, empty, of pasteboard, put together or not, with ornaments of any material, including weight of container kilo..	4. 00
1926	1919	Busts, pasteboard, carton pierre, or papier-maché, all kinds and sizes, with or without pedestal of other material, gross weight kilo..	1. 00
1927	1918	Buttons, papier-maché or pasteboard, including weight of container kilo..	. 40

SECTION THIRTEENTH.—STATIONERY, PASTEBOARD, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1928	1923	Calcomanies, all kinds, including weight of container kilo .....	.50
1929	1912	Calendars, pads, mounted on pasteboard or not, includ- ing weight of container .....	.80
1930	1927	Cardboard, common, in sheets of any thickness, beaten or in leaves, gross weight .....	.08
1931	1928	Cardboard, plate, fine, bristol, or glazed, including weight of container .....	.25
1932	1929	Cards, for the game of loto, including weight of con- tainer .....	.25
1933	1971	Cards, playing, all kinds, including weight of con- tainer	2.00
1934	2008	Cards, visiting, blank, all kinds, including weight of container .....	.50
1935	2009	Cards, visiting, with inscription, name or address, litho- graphed, engraved, or printed, including weight of container	2.00
1936	2010	Cards, of congratulation, with engraving, photographs, ornaments of silk, ribbon, or flowers, including weight of container	4.00
1937	1943	Cases, paper or pasteboard, all kinds not specified, with- out ornaments of other materials, with or without appurtenances, including weight of container	1.00
1938	2018	Chalk, prepared for school use, gross weight .....	.05
1939	1933	Chromos and oleographs, all kinds, framed or not, in- cluding weight of container	1.00
1940	1932	Cigar cases, pasteboard, all kinds and sizes, with or without metal ornaments, including weight of con- tainer	1.00
1941	1937	Collars, paper, with or without cloth center, including weight of container .....	.50
1942	1930	Cornucopias, paper or cardboard, with or without orna- ments, for bonbons, etc., including weight of con- tainer .....	.30
1943	2000	Cuffs, paper, with or without cloth inside, including weight of container .....	.50
1944	1938	Dice, pasteboard, including weight of container .....	.50
1945	1940	Engravings (<i>estampas</i>), sketches or landscapes, on paper or cardboard, black or colored, with or without frame, including weight of container	1.00
1946	1953	Engraving (cuts), on paper or cardboard, all kinds, with or without frame, including weight of container	1.00
1947	2004	Envelopes, common, paper, for letters, with or without cloth, including weight of container .....	.50
1948	2005	Envelopes, paper, for letters, with or without cloth, with monogram, head, printing, lithographing, or engrav- ing, including weight of container	1.00
1949	2002	Erasers, all kinds, for office use, including weight of con- tainer	2.00

SECTION THIRTEENTH.—STATIONERY, PASTEBOARD, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemalan tariff.		
			<i>Dollars.</i>
1950	1909	Fans, paper or pasteboard, with or without ornaments of other materials, including weight of container..kilo..	1. 00
1951	1946	Figures, or statuettes (<i>figuras</i>), papier-maché, pasteboard, or carton pierre, with or without base of other material, including weight of container ..kilo..	1. 50
1952	1948	Filters, paper, including weight of container.....kilo..	. 20
1953	1947	Flowers, paper, mounted or unmounted, including weight of container ..kilo..	1. 00
1954	1968	Frames, paper or pasteboard, with or without prints or engravings, including weight of container.....kilo..	1. 00
1955	1952	Gum (mucilage), liquid, for office use, with or without brushes, including weight of container.....kilo..	1. 00
1956	2012	Inks, writing, liquid, all kinds and colors, in glass or earthen, gross weight.....kilo..	. 10
1957	2013	Ink, indelible, for marking clothing and for stamps, including weight of container. ....kilo..	2. 00
1958	2014	Ink, India, in cakes, for drawing, including weight of container ..kilo..	2. 00
1959	2015	Ink, common, marking, in paste, gross weight.....kilo..	. 25
1960	2016	Inkstands, crystal, glass, or porcelain, without ornaments of other materials, including weight of container.kilo..	. 50
1961	2017	Inkstands, crystal, glass, or porcelain, with ornaments of other materials, including weight of container.kilo..	1. 00
1962	1944	Invoices, blank, with or without printed heads, including weight of container.....kilo..	. 75
1963	1945	Lanterns, paper, for illuminations, all kinds, gross weight ..kilo..	. 50
1964	1969	Masks, pasteboard, including weight of container..kilo..	3. 00
1965	1970	Music, printed or manuscript, unbound, including weight of container.....kilo..	. 05
1966	1996	Muslin, bookbinders', including weight of container, kilo.....	. 20
1967	1910	Ornaments and trimmings of paper or pasteboard, without addition of other materials, for garlands of flowers, or other uses, including weight of container, kilo ..kilo..	1. 00
1968	1973	Paper, unruled, cotton, all kinds and colors, not specified, gross weight.....kilo..	. 15
1969	1974	Paper, unsized and without gloss, for printing, gross weight ..kilo..	. 10
1970	1975	Paper, all kinds, perforated or open-worked, unmanufactured, including weight of container ..kilo..	. 50
1971	1976	Paper, all kinds, ruled in any way, gross weight ..kilo..	
1972	1977	Paper, letter, all kinds, with monograms, or printed, engraved, or lithographed heads, including weight of container ..kilo..	1. 00
1973	1978	Paper, blotting, cotton, with or without advertisements, including weight of container ..kilo..	. 08
1974	1979	Paper, all kinds, colored, for bookbinding, glazed or marbled, including weight of container.....kilo..	. 15

SECTION THIRTEENTH.—STATIONERY, PASTEBOARD, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
1975	1980	Paper, wall, on cloth or silk, including weight of container.....kilo..	.60
1976	1981	Paper, wall, all kinds, gilt, silvered, or satined in whole or part, including weight of container.....kilo..	.40
1977	1982	Paper, all kinds, gilt or silvered surface, plain or figured, including weight of container.....kilo..	.50
1978	1983	Paper, wall, all kinds, not gilt, silvered or satined, including weight of container.....kilo..	.20
1979	1984	Paper, cigarette, all kinds, unglazed, gross weight.....kilo..	.30
1980	1985	Paper, water-proof, or parchment paper, all kind, including weight of container.....kilo..	.10
1981	1986	Paper, brown, except filter or manila, gross weight, kilo.....	.05
1982	1987	Paper, tracing, including weight of container.....kilo..	.20
1983	1988	Paper, tissue, including weight of container.....kilo..	2.00
1984	1989	Paper, sand or emery, gross weight.....kilo..	.06
1985	1990	Paper, on cloth, pitched or tarred, gross weight.....kilo..	.08
1986	1991	Paper, fly, all kinds, including weight of container.....kilo..	.50
1987	1992	Paper, China, gross weight.....kilo..	.25
1988	1993	Paper, colored, for making flowers, including weight of container.....kilo..	.20
1989	2011	Paper, cloth, engineers', for tracing, including weight of container.....kilo..	.20
1190	1935	Paper cutters, metal, wood, rubber, horn, or bone, including weight of container.....kilo..	2.00
1191	1936	Paper cutters, mother of pearl, or ivory, including weight of container.....kilo..	8.00
1992	2001	Parasols, paper, all kinds, including weight of container, kilo.....	.50
1993	1957	Pencil-cases, wood, bone, rubber, or common metal, including weight of container.....kilo..	1.50
1994	1999	Pencil-holders, metal, including weight of container, kilo.....	1.50
1995	1958	Pencils, heavy, for artisans' use, including weight of container.....kilo..	.75
1996	1959	Pencils, colored, including weight of container.....kilo..	1.00
1997	1960	Pencils, with ribbons, cords, small chains, or metal ornaments, including weight of container.....kilo..	1.00
1998	1966	Penholders, wood, bone, tin, rubber, or glass, including weight of container.....kilo..	1.00
1999	1967	Penholders, tortoise, mother-of-pearl, ivory, or metal, with or without case, including weight of container, kilo.....	4.00
2000	1949	Photographs, on paper, glass, or porcelain, including weight of container.....kilo..	2.00
2001	1925	Pocketbooks, pasteboard, or covered oilcloth, with or without appurtenances, including weight of container, kilo.....	1.00

SECTION THIRTEENTH.—STATIONERY, PASTEBOARD, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2002	1924	Portfolios, pasteboard, or covered with oilcloth, cloth, or skin, all kinds, including weight of container, kilo .....	.50
2003	1926	Portfolios, pasteboard, or covered with oilcloth, including weight of container.....kilo..	1.00
2004	1998	Quills, writing, including weight of container.....kilo..	1.00
2005	1954	Rubber (erasers), for office use, including weight of container.....kilo..	1.00
2006	2003	Rules, all kinds, for desk use, with or without ornaments or strips of metal, including weight of container. kilo..	.50
2007	1995	Screens, paper, with or without ornaments of other material, including weight of container.....kilo..	1.00
2008	1955	Sealing wax, fine, in bars or cakes, for office use, including weight of container.....kilo..	1.25
2009	1956	Sealing wax, common, for sealing bottles and other uses, including weight of container.....kilo..	.30
2010	1997	Slate pencils or crayons for drawing, including weight of container.....kilo..	.25
2011	1941	Tags, paper or pasteboard, with label, including weight of container.....kilo..	1.00
2012	1942	Tags, paper or pasteboard, blank, including weight of container.....kilo..	.25
2013	1916	Tickets, for raffles, lottery, railroads, and exhibitions, including weight of container.....kilo..	1.00
2014	1950	Torpedoes, paper, including weight of container.....kilo..	1.00
2015	1915	Trays (<i>azafates</i>) and bottle stands, paper or pasteboard, including weight of container.....kilo..	.50
2016	2007	Wads, pasteboard, felt, or tow, for firearms, including weight of container.....kilo..	.50
2017	1972	Wafers, all kinds, for letters, including weight of container.....kilo..	1.00
2018	1931	Waiters (trays) of papier maché, or pasteboard, all kinds, japanned or not, including weight of container, kilo .....	.50

SECTION FOURTEENTH.—WINES, LIQUORS AND ARTICLES OF FOOD.

			<i>Dollars.</i>
2019	2025	Absinthe, up to 20°, Beaumé, in any container.....litre..	.85
2020	2030	Almonds, unshelled, gross weight.....kilo..	.15
2021	2031	Almonds, shelled, gross weight.....kilo..	.30
2022	2027	Anisado, up to 20° Beaumé, in any container.....litre..	.85
2023	2028	Anisette, in any container.....litre..	.65
2024	2119	Bacon, packed in wood, including weight of salt in package, gross weight.....kilo..	.15
2025	2120	Bacon, in cans, gross weight.....kilo..	.25

SECTION FOURTEENTH.—WINES, LIQUORS AND ARTICLES OF FOOD—Cont'd.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2026	2051	Barley, unhulled, gross weight.....kilo..	.01
2027	2052	Barley, pearl or hulled, gross weight.....kilo..	.05
2028	2053	Beer, all kinds, in any container.....litre..	.20
2029	2040	Biscuits, all kinds, not specified, sweet or not, gross weight.....kilo..	.15
2030	2026	Bitters, all kinds, in any container.....litre..	.65
2031	2093	Butter, in any container, gross weight.....kilo..	.15
2032	2064	Cacao, cream of (liqueur), and all other creams similar, litre.....	.65
2033	2043	Cacao, in grain, gross weight.....kilo..	.20
2034	2044	Cacao, in powder or cake, with or without sugar includ- ing weight of container.....kilo..	.75
2035	2099	Cakes, spiced, gross weight.....kilo..	.15
2036	2032	Canary seed, gross weight.....kilo..	.12
2037	2029	Capers, large and small, gross weight.....kilo..	.25
2038	2050	Caviar, gross weight.....kilo..	.25
2039	2107	Cheese, all kinds, gross weight.....kilo..	.15
2040	2048	Chestnuts, unshelled, gross weight.....kilo..	.15
2041	2049	Chestnuts, shelled, gross weight.....kilo..	.25
2042	2066	Chocolate, all kinds, not specified, including weight of container.....kilo..	.75
2043	2117	Cider, sparkling.....litre..	.20
2044	2046	Cinnamon, gross weight.....kilo..	.75
2045	2054	Cloves, gross weight.....kilo..	.15
2046	2055	Cloves, in powder, gross weight.....kilo..	.30
2047	2019	Codfish and herring, dried, salt, smoked, or pickled, packed in wood or earthen, gross weight.....kilo..	.15
2048	2020	Codfish and herring, dried, salt, smoked, or pickled, canned or preserved, gross weight.....kilo..	.25
2049	2039	Codfish, in cans, bottles, or jars, gross weight.....kilo..	.25
2050	2060	Cognac (brandy) up to 20° Beaumé, in any package.litre..	.85
2051	2057	Confections and sweetmeats, dried, gross weight.....kilo..	.30
2052	2078	Crackers, all kinds, sweet or not, gross weight.....kilo..	.15
2053	2056	Cumin, gross weight.....kilo..	.12
2054	2063	Curaçao (curaçoa) liqueur.....litre..	.65
2055	2069	Dates, in any package, gross weight.....kilo..	.15
2056	2073	Extract of meat, except those for medicinal use, in any package, gross weight.....kilo..	.25
2057	2082	Figs, dried, in any package, gross weight.....kilo..	.15
2058	2037	Filberts, gross weight.....kilo..	.15
2059	2103	Fish, smoked, salted, pickled, or dried in wood, gross weight.....kilo..	.15
2060	2104	Fish, canned, preserved, or in oil, gross weight.....kilo..	.25
2061	2080	Flour, wheat, all kinds, net weight.....kilo..	.05½
2062	2058	Food articles, preserved, not specified, in wood, gross weight.....kilo..	.15
2063	2059	Food articles, preserved, not specified, in any package not wood, gross weight.....kilo..	.25
2064	2075	Fruits, in brandy, in any container, gross weight..kilo..	.75

SECTION FOURTEENTH.—WINES, LIQUORS AND ARTICLES OF FOOD—Cont'd.

Number of items in—		Articles	Duty.
English translation.	Guatemala- lan. tariff.		
			<i>Dollars.</i>
2065	2076	Fruits, in sirup, or candied, gross weight	kilo.. .30
2066	2077	Fruits, dried, not specified, gross weight	kilo.. .15
2067	2086	Gin, in any container	litre.. .85
2068	2079	Ginger ale	litre.. .20
2069	2122	Grapes, apples, pears, quinces, peaches, cherries, and strawberries, in sirup, gross weight	kilo.. .30
2070	2083	Hams, smoked or salt, including weight of salt in pack- age, gross weight	kilo.. .15
2071	2084	Ham, canned, gross weight	kilo.. .25
2072	2087	Juices, fruit, all kinds, natural or artificial, in any con- tainer, gross weight	kilo.. .30
2073	2061	Kummel (<i>cominillo</i>) liqueur	liter.. .65
2074	2091	Liquors (cordials, etc.), spirituous, all kinds, not speci- fied, less than 20° Beaumé	liter.. .65
2075	2088	Lobster, preserved, in any package, gross weight	kilo.. .25
2076	2092	Maizena or cornstarch, gross weight	kilo.. .08
2077	2081	Meal, oat, barley, corn, rice, beans, or rye, gross weight, kilo .....	.10
2078	2047	Meats, preserved, in any package not wooden, including weight of container	kilo.. .25
2079	2089	Milk, condensed, gross weight	kilo.. .25
2080	2096	Mustard, ground or prepared as dressing, gross weight, kilo .....	.25
2081	2098	Nutmegs, including weight of container	kilo.. 1.00
2082	2097	Nuts (walnuts), gross weight	kilo.. .08
2083	2038	Oats, hulled, gross weight	kilo.. .04
2084	2021	Olives, in oil or stuffed, gross weight	kilo.. .25
2085	2022	Olives, pickled, in wooden vessels, gross weight	kilo.. .15
2086	2023	Olives, in glass, gross weight	kilo.. .25
2087	2101	Pastes, edible, animal, gross weight	kilo.. .25
2088	2102	Pastes, edible, vegetable, gross weight	kilo.. .25
2089	2105	Pepper, large and small, in grain, gross weight	kilo.. .12
2090	2106	Pepper, ground, gross weight	kilo.. .20
2091	2065	Pepper, red (<i>chile</i>), all kinds, gross weight	kilo.. .12
2092	2071	Pickles, all kinds, in wood, gross weight	kilo.. .15
2093	2072	Pickles, all kinds, in any container not wood, gross weight	kilo.. .25
2094	2062	Prunes, in any container, gross weight	kilo.. .15
2095	2100	Raisins, gross weight	kilo.. .15
2096	2024	Rum (<i>aguardiente</i>), all kinds, in any container, up to 20° Beaumé	litre.. .85
2097	2033	Saffron, dried, or in oil, including weight of container, kilo	5.00
2098	2108	Sago, tapioca, and persian salep, gross weight	kilo.. .18
2099	2111	Salt, common, rock, or grain, gross weight	kilo.. .03
2100	2112	Salt, refined, ground, in packages or jars, gross weight, kilo .....	.06
2101	2113	Salmon, canned, gross weight	kilo.. .25
2102	2115	Sardines, smoked, salted, pickled, or dried, not in cans, jars, or pots, gross weight	kilo.. .15

SECTION FOURTEENTH.—WINES, LIQUORS AND ARTICLES OF FOOD—Cont'd.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2103	2116	Sardines, in cans, jars, or pots, gross weight..... kilo..	.25
2104	2132	Sarsaparilla (beverage) litre..	.25
2105	2114	Sauces, catchups, etc., all kinds, gross weight..... kilo..	.25
2106	2109	Sausages, large (<i>salchichón</i>), in wood, gross weight..... kilo..	.15
2107	2110	Sausages, large (<i>salchichón</i>), canned, gross weight..... kilo..	.25
2108	2041	Sausages (<i>butifarras</i>), packed in wood, gross weight, kilo.....	.15
2109	2042	Sausages (<i>butifarras</i>), in tin, glass, or earthen, gross weight..... kilo..	.25
2110	2095	Sausage, bologne, in any package, gross weight... kilo..	.25
2111	2067	Sausages (<i>chorizos</i>), packed in wood, gross weight... kilo..	.15
2112	2068	Sausages (<i>chorizos</i>), in any package not wood, gross weight..... kilo..	.25
2113	2094	Shellfish, preserved, in any package, gross weight, kilo.....	.24
2114	2045	Shrimp, canned, gross weight..... kilo..	.25
2115	2034	Sugar, refined, gross weight..... kilo..	.20
2116	2035	Sugar, raw, all kinds, gross weight..... kilo..	.10
2117	2036	Sugar, muscovado or <i>panela</i> , gross weight..... kilo..	.05
2118	2070	Sweetmeats, all kinds not specified, in any package, gross weight..... kilo..	.30
2119	2085	Sirups, all kinds except medicinal..... litre..	.30
2120	2118	Tea, green, black, or gunpowder, gross weight..... kilo..	.45
2121	2090	Vegetables, preserved, in some liquid or dried, gross weight..... kilo..	.25
2122	2074	Vermicelli, macaroni, and Italian paste, gross weight, kilo.....	.08
2123	2130	Vermouth, in any container..... litre..	.50
2124	2123	Vinegar, all kinds, in wood..... litre..	.10
2125	2124	Vinegar, in glass or earthen..... litre..	.20
2126	2121	Wheat, gross weight..... 100 kilos..	2.17
2127	2131	Whisky, in any package, up to 20° Beaumé..... litre..	.85
2128	2125	Wines, red, table, in wood..... litre..	.12
2129	2126	Wines, red, table, not in wood..... litre..	.15
2130	2127	Wines, dessert, as sherry, muscatel, malvasia, malaga, port, pedro, ximenes, and the like, in any container, liter.....	.40
2131	2128	Wines, white, all kinds, in any container..... litre..	.40
2132	2129	Wines, sparkling, as champagne and the like, in any container..... litre..	.50

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, AND DRUGGISTS' ARTICLES.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2133	2150	Acetal, net weight kilo..	2.50
2134	2151	Acetate of ammonia, liquid or solid, of lime, potash, soda, or zinc, net weight kilo..	.80
2135	2152	Acetate of alumina, net weight kilo..	.10
2136	2153	Acetate of copper (verdegris), net weight kilo..	.50
2137	2154	Acetate of iron, solid or in solution, net weight kilo..	.25
2138	2155	Acetate of oxide of amyl, net weight kilo..	4.00
2139	2156	Acetate of lead (neutral), sugar of lead, net weight. kilo..	.30
2140	2157	Acetate of lead (basic), liquid, net weight kilo..	.50
2141	2158	Acetate of quinine, net weight kilo..	10.00
2142	2159	Acetophenone (hypnone, methylbenzoyl) and hypnal (chloralantipyrene), net weight kilo..	20.00
2143	2160	Acid, acetic, glacial or crystalline, and arsenious acid, net weight kilo..	.40
2144	2161	Acid, acetic, from 6° to 8°, called commercial, and oxalic acid, net weight kilo..	.25
2145	2162	Acids, arsenic and chromic, net weight kilo..	1.00
2146	2163	Acids, benzoic or flowers of benzoin, camphoric, cynamie, sclerotic, gynocardic, malic, succinic, uric, and valerianic, net weight kilo..	9.50
2147	2164	Acids, butyric and amylic, net weight kilo..	4.00
2148	2165	Acids, citric, boric, and tartaric, net weight kilo..	.60
2149	2166	Acid, citrochloric, net weight kilo..	.50
2150	2167	Acids, crysophanic and crysamic, net weight kilo..	6.00
2151	2168	Acid, phenic or carbolic (phenol), crystallized or in aqueous or alcoholic solution, concentrated, net weight, kilo ..	.75
2152	2169	Acid, carbolic, impure, in weak solution, dark color, called disinfecting liquid, including weight of container kilo..	.15
2153	2170	Acids, lactic, pure or commercial, and sulphoricinic acid (sulpholime), net weight kilo..	3.00
2154	2171	Acids, picric and purpuric, net weight kilo..	1.00
2155	2172	Acid, sozolic (aseptol), net weight kilo..	1.50
2156	2173	Acids, tannic, gallic, pyrogallie, hydrocyanic (dilute), and salicylic, net weight kilo..	6.25
2157	2174	Acids, sulphuric, sulphurous, carbonic, hydrosulphuric, phosphoric, hypophosphoric, hydrofluoric, hydrofluosilicic, nitric, muriatic, nitrochloric, and other mineral acids, not specified, anhydrous or in solution, concentrated to any degree, in any ordinary vessel, gross weight kilo..	.15
2158	2175	Acids, organic, not specified, net weight kilo..	1.00
2159	2176	Acids, metallic, not specified. (<i>See Metallic Salts and Chemical Compounds, not specified, No. 2867.</i>)	
2160	2178	Agar-agar (Japan glue) and marine algæ, and fucus, not specified and for medicinal use, net weight kilo..	.50
2161	2179	Agaric (punk), white, net weight kilo..	.75

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatema- lan tariff.		
			<i>Dollars.</i>
2162	2703	Ague cure, Ayer's, and other specifics for fever, of any maker, in bottles up to 125 grams.....dozen..	6. 00
2163	2188	Albumen, dried, and albuminates, including weight of container.....kilo..	1. 00
2164	2195	Alcohol, absolute.....litre..	1. 60
2165	2196	Alcohol, methylic (wood spirit).....litre..	. 40
2166	2189	Alkaloids, vegetable or animal, as aconitine, atropine, berberine, caffeine, cannabine, cantharadine, cicutine, cocaine, codeine, cubebine, curaine, daturine, digitaline, delfine, strychnine, narceine, narcotine, nicotine, morphine, piperine, veratrine, and the like, not specified, and their derivatives, net weight.....gram..	. 20
2167	2190	Alkaloids, mineral, artificial or natural, extracted from mineral coal, not specified, net weight.....kilo..	1. 00
2168	2191	Alkaloids, organic, artificial, as trimethylamine, their salted and similar compounds, not specified, net weight, kilo.....	8. 00
2169	2200	Almond paste, or almond powder, gross weight.....kilo..	. 40
2170	2205	Aloes, any kind, and extract of same, net weight....kilo..	. 50
2171	2206	Aloine, net weight.....kilo..	6. 40
2172	2207	Aluminium, metallic, in ribbons, threads, and sheets, net weight.....kilo..	1. 00
2173	2210	Amber, common, yellow, citrine, net weight.....kilo..	. 60
2174	2211	Ambergris, net weight.....gram..	1. 00
2175	2208	Ammonia, liquid, or ammoniac, net weight.....kilo..	. 45
2176	2209	Ammonia, anhydrous, in metal cylinders, forcemachines; and any other gas liquified by pressure, or compressed, gross weight.....kilo..	. 25
2177	2212	Aniline, and like substances, and aniline dyes, of all shades and qualities; naphthaline and alizarine dyes, net weight.....kilo..	2. 00
2178	2213	Anilines, medicinal, in powder or sticks, in flasks or boxes, including weight of container.....kilo..	2. 50
2179	2215	Anise, star, including weight of container.....kilo..	. 35
2180	2216	Anise, green (common anise), gross weight.....kilo..	. 15
2181	2221	Anthrarobine, net weight.....kilo..	6. 00
2182	2217	Antifebrine, net weight.....kilo..	2. 50
2183	2218	"Antimerulio" (a preparation for destroying fungus growths in buildings), gross weight.....kilo..	. 05
2184	2219	Antimony, diaphoretic, yellow sulphur of antimony, and kermes, net weight.....kilo..	3. 25
2185	2220	Antipyrine and its compounds, not specified, net weight, kilo.....	18. 00
2186	2223	Apiol, crystalized or liquid, net weight.....kilo..	5. 50
2187	2222	Apparatus, medical, household, not specified, as for douches, including weight of container.....kilo..	. 25
2188	2558	Araroba, whole or powdered, net weight.....kilo..	1. 50
2189	2224	Arseniates and arsenites of ammonia, potash, soda, and other arsenic compounds not specified, net weight. kilo..	. 50

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemalan tariff.		
			<i>Dollars.</i>
2190	2225	Arsenate of quinine, net weight .....kilo..	8.00
2191	2226	Arsenical preparations, as Fowler's solution, Pearson's solution, etc., arsenical pomades and pastes, and others not specified, net weight .....kilo..	1.00
2192	2227	Arsenical preparations and compounds, for industrial uses, as hide poison, gross weight .....kilo..	.10
2193	2228	Asbestos, cleaned, washed, or with some other chemical or mechanical preparation, net weight .....kilo..	.15
2194	2229	Asphalt, superior quality, for varnishes, net weight.kilo..	.20
2195	2418	Asthma cure, Himrod's, in its peculiar vials.....dozen..	5.50
2196	2829	Atomizers for ether or chloroform, for local anesthetic applications, and bottles for chloroforming ....dozen..	3.00
2197	2782	Atomizers, for spraying perfumes and other liquids, any style or material, including weight of container.kilo..	4.00
2198	2133	Attachments and loose parts not specified, of syringes, nursing bottles, and breast pumps, including weight of container .....kilo..	2.75
2199	2230	Azotates. (<i>See</i> Nitrates).	
2200	2882	Bags, small, medicinal, including weight of container kilo.....	2.00
2201	2272	Bags, rubber, for gases, including weight of container, kilo.....	1.00
2202	2665	Baking powders (yeast powders), gross weight....kilo..	.40
2203	2246	Balsam of copaiba, liquid or solid, and Canada balsam, net weight.....	2.00
2204	2247	Balsam, Mecca, Peru or dark, Tolu or white, storax, liquid amber, and other natural balsams not specified, and pitch of the sea pine, net weight .....kilo..	1.00
2205	2248	Balsams, standard medicinal, as Commendador, Fioraventi, tranquil balsam, Pelletier's, opodeldoc, etc., including weight of container.....kilo..	.70
2206	2249	Balsams, medicinal, patent, as Jayne's Carminative, Waren's Carminative, etc., gross weight.....kilo..	.80
2207	2398	Bark, Panama (<i>Quillaria saponaria</i>), net weight ..kilo..	.30
2208	2399	Bark, Peruvian, yellow, red, gray, or any other, net weight.....kilo..	.60
2209	2400	Bark, Peruvian, powdered, net weight.....kilo..	.90
2210	2401	Bark, simarouba, net weight .....kilo..	.80
2211	2402	Barks, tree, medicinal, not specified, net weight ..kilo..	.50
2212	2403	Bark, of pomegranate root, powdered, net weight .kilo..	5.00
2213	2252	Baryta, caustic, and binoxide of barium, net weight, kilo.....	1.00
2214	2417	Beads (strings) of iris (orris), net weight.....kilo..	.75
2215	2585	Beans, Calabar, net weight .....kilo..	.30
2216	2586	Beans, St. Ignatius', whole or grated, net weight.kilo..	1.10
2217	2587	Beans, Tonka, net weight.....kilo..	3.00
2218	2261	Benzine, toluene, and the like, in vessels of at least 1 litre.....litre..	.30
2219	2262	Benzine, toluene, and the like, in vessels of less than 1 litre, gross weight .....kilo..	.40

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in--		Article.	Duty.
English translation.	Guatemala tariff.		
			Dollars.
2220	2258	Benzoates of ammonia, lime, strontia, iron, lithia, magnesia, and soda, and others not specified, net weight, kilo	3.00
2221	2259	Benzoates, effervescent, granulated or powdered, in flasks containing up to 60 grams.....dozen..	4.00
2222	2260	Benzosol (<i>benzoylguaiacol</i>) and betol, net weight..gram..	.05
2223	2240	Berries, juniper or laurel, including weight of container, kilo .....	.30
2224	2265	Bicarbonate of potash, crystalized, net weight kilo..	.60
2225	2266	Bicarbonate of soda, in crystals or cake, including weight of container .....	.20
2226	2269	Biscuits and cakes, medicinal, gross weight..... kilo..	.15
2227	2267	Bismuth, metallic, net weight .....	.60
2228	2268	Bismuth, white oxide, carbonate, nitrate, or subnitrate of, in powder or crust, net weight	4.20
2229	2621	Blowers, for powders, of rubber and glass, metal or gutta-percha, including weight of container kilo..	1.50
2230	2239	Blue, ultramarine, powdered or in balls, and green, ultramarine, net weight .....	.20
2231	2422	Boiler-cleaning preparations, liquid or paste (as glycoline, etc.), gross weight..... kilo..	.10
2232	2271	Bole, Armenian, for gilding or medicinal uses, net weight, kilo .....	.20
2233	2615	Bones, cuttlefish, including weight of container ... kilo..	.60
2234	2273	Borate of ammonia and soda (borax) net weight... kilo..	.25
2235	2274	Boron, and its chemical compounds, not specified, net weight .....	.80
2236	2548	Bottles, flasks, vials, for druggists' use, including flasks with glass stopper, wide or narrow mouth, bottles for sirups, with their glass or metal caps, glass vessels for conserves, show bottles of all kinds, except otherwise specified, all with or without engraved or paper labels, imported separately, gross weight..... kilo..	.40
2237	2288	Bougies, Keinald's, and others, in cases of one dozen, dozen cases	3.50
2238	2270	Bovinine (liquid meat extract) in flasks up to 125 grams, dozen	3.00
2239	2292	Boxes, wooden, all shapes, without lining (covering) and unvarnished, for pills and other pharmaceutical uses, including weight of container .....	.20
2240	2293	Boxes of reagents, for chemical, pharmaceutical metallurgical, and medical laboratories. The contents will pay the tariff rates, and the empty boxes..... each..	2.00
2241	2852	Breast pumps, any style, complete or in parts, including weight of container	2.00
2242	2281	Bromal, hydrated, net weight	25.00
2243	2283	Bromide of ethyl, net weight	6.00
2244	2284	Bromide of camphor, net weight	4.00
2245	2285	Bromide of iron, potassium, and zinc, net weight. kilo..	1.50

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2246	2286	Bromides, of sodium and ammonia, net weight .....kilo..	2.00
2247	2287	Bromide, or bromo-hydrate of quinine, net weight..kilo..	25.00
2248	2279	Bromine, and its chemical compounds, not specified, net weight .....kilo..	1.50
2249	2282	Bromoform, net weight.....kilo..	20.00
2250	2280	Bromo-phosphates, granulated, effervescent, in flasks up to 250 grams .....dozen..	4.00
2251	2694	Butter of cacao, net weight .....kilo..	1.10
2252	2289	Butyrates of lime and ethyl, net weight.....kilo..	5.00
2253	2294	Calamus, aromatic (sweet flag), net weight .....kilo..	1.10
2254	2192	Camphor, in cakes, net weight .....kilo..	.75
2255	2193	Camphor, artificial (camphor of spirits of turpentine), net weight.....kilo..	.75
2256	2194	Camphor, artificial, made from other essential oils, as en- calyptol, menthol, thymol, and the like, and thumenol, including weight of container.....kilo..	8.50
2257	2296	Canna-fistula, net weight.....kilo..	.30
2258	2297	Cantharides, whole or powdered, net weight .....kilo..	4.50
2259	2298	Capsules and pearls, gelatinous, empty, including weight of container .....kilo..	8.50
2260	2299	Capsules and pearls, gelatinous or wafer, containing me- dicinal substances, liquid or solid, in packages of at least one-half, net weight .....kilo..	6.50
2261	2300	Capsules (the same), in packages of less than half a kilo, including weight of container.....kilo..	4.00
2262	2301	Capsules or caps, paper, for bottles, including weight of container .....kilo..	.75
2263	2302	Caramel, for coloring wines, gross weight.....kilo..	.05
2264	2530	Carbolates (phenates) of ammonia, soda, and others not specified, net weight .....kilo..	1.50
2265	2303	Carbolineum, carbonyl, phenoline, and other like anti- septic liquids for preserving wood, gross weight.kilo..	.05
2266	2304	Carbonate of baryta, and strontia, artificially prepared, net weight .....kilo..	.40
2267	2305	Carbonate of lime, crystallized (marble), powdered, gross weight .....kilo..	.02
2268	2306	Carbonate of lime, natural, amorphous (chalk), powdered, but otherwise not prepared, gross weight .....kilo..	.05
2269	2307	Carbonate of lime, natural (chalk), prepared for medic- inal use, in powder or troches, net weight.....kilo..	.15
2270	2308	Carbonate of lime of animal origin, powdered, for medi- cinal use, such as powdered eggshells, red coral, sea- shells, snail, crab, etc., net weight .....kilo..	.25
2271	2309	Carbonate of lime, precipitated, net weight .....kilo..	.45
2272	2310	Carbonate of copper, artificial, or blue ash, powdered, net weight.....kilo..	.20
2273	2311	Carbonate of iron, and of manganese, net weight ..kilo..	.30
2274	2312	Carbonate of lithia, net weight.....kilo..	2.50
2275	2313	Carbonate of lithia, granulated, effervescent, in bottles of at least half a kilo. net weight .....kilo..	1.80

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2276	2314	Carbonate of lithia, granulated, effervescent, in bottles up to 60 grams.....dozen..	1. 50
2277	2315	Carbonate of magnesia, powdered, or in cakes wrapped in paper, including weight of container.....kilo..	. 35
2278	2316	Carbonate of lead (white lead), powdered or in cakes, gross weight.....kilo..	. 20
2279	2317	Carbonate of potash (pearlash), net weight.....kilo..	. 50
2280	2318	Carbonate of soda, crystallized, and soda ash, net weight.....kilo..	. 10
2281	2319	Carbonate of zinc, net weight.....kilo..	. 20
2282	2326	Carbons, for galvanic batteries, gross weight.....kilo..	. 05
2283	2320	Cards, photographers', including those for pasting the photographs, dry plates, sensitive or not, albumenized paper, and all other articles of fine pasteboard or paper for the same use, and photograph covers, gross weight, kilo.....	. 20
2284	2327	Carmine, Florence (carmine of fine cochineal), and carmine of indigo, and others, net weight.....kilo..	16. 00
2285	2328	Carmine (red lake of cochineal) and lake of other colors, except litmus, net weight.....kilo..	2. 20
2286	2329	Carthamus or bastard saffron, or Indian saffron, net weight.....kilo..	1. 00
2287	2487	Cases, surgical, pocket.....each..	2. 00
2288	2488	Cases, surgical, with instruments for dissection, amputation, obstetrics, etc., including weight of container, kilo.....	1. 00
2289	2489	Cases, dentists', with 24 instruments or less.....each..	5. 00
2290	2490	Cases of pastilles for hypodermic injections, if of leather, wood, or pasteboard, without any ornament whatever, will pay duties only on their contents. (<i>See Hypodermic Injections.</i>) If they are of white metal, hard rubber, or celluloid, the cases themselves shall pay duty separately.....each..	2. 00
2291	2491	Cases or valises for photographic cameras, without appurtenances or photograph materials, including weight of container.....kilo..	. 25
2292	2330	Casein, net weight.....kilo..	8. 00
2293	2291	Cashoos (<i>cachous</i>), for the mouth, or grains of terra japonica in the form of pastilles or in silvered pills, and the like, including weight of container.....kilo..	3. 00
2294	2331	Castoreum, whole, net weight.....kilo..	15. 00
2295	2332	Castoreum, powdered, net weight.....kilo..	18. 00
2296	2290	Catechu (<i>terra japonica</i>), in paste, including weight of container.....kilo..	. 60
2297	2669	Catgut or imitation, in bottles with two bunches...gram..	2. 00
2298	2907	Catheters, urethral, flexible, any material and diameter, dozen.....	2. 25
2299	2908	Catheters, metal or any nonflexible material.....dozen..	5. 00
2300	2334	Caustic, Bidet's, in vials up to 5 grams.....dozen..	3. 00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			Dollars.
2301	2335	Caustic, Vienna, etc., and all kinds of caustic salts in sticks, except nitrate of silver and others specified, including weight of container.....kilo..	1.15
2302	2336	Caustic barley (sneezewort), net weight.....kilo..	.65
2303	2348	Cements or mastics (compositions having the property of hardening spontaneously), pay as follows:	
		(a) If used for cementing glass or china, as diamond cement, stratená, or others, gross weight.....kilo..	.50
		(b) If used for cementing common building stones, as granite, marble, etc., and cast iron; also hydraulic cements, gross weight.....kilo..	.15
		(c) The other kinds, such as putty, gross weight.....kilo..	.12
2304	2340	Cerates, medicinal, in packages of less than 500 grams, including weight of container.....kilo..	1.50
2305	2341	Cerates, medicinal, in packages of 500 grams or more, net weight.....kilo..	2.00
2306	2901	Chairs, operating, for dentists, barbers, and surgeons, imported separately.....each..	15.00
2307	2409	Chalk, with mercury (<i>mercurium cum creta</i>), net weight, kilo.....	.60
2308	2322	Charcoal, Belloc's, or other of vegetable origin, for medicinal use, in bottles up to 125 grams.....dozen..	2.50
2309	2323	Charcoal, animal (bone), in grains, washed, silicated, or with other substances, for filtering or decolorizing liquids, net weight.....kilo..	.05
2310	2324	Charcoal, animal, powdered (boneblack), or other charcoal, not medicinal, powdered, and lampblack, gross weight.....kilo..	.08
2311	2325	Charcoal, sponge (burnt sponge), net weight.....kilo..	2.20
2312	2359	Chloral, hydrated, in sheets or crystals and the like, net weight.....kilo..	2.60
2313	2360	Chloral, anhydrous, trichlorophenol and like compounds not specified, net weight.....kilo..	3.20
2314	2358	Chloralamide, net weight.....kilo..	5.00
2315	2356	Chlorate of potash, net weight.....kilo..	.50
2316	2357	Chlorate of baryta, strontia, or soda, net weight.....kilo..	.60
2317	2369	Chloride of ammonia, or hydrochlorate of ammonia (<i>sal amoniaco</i>), net weight.....kilo..	.20
2318	2370	Chloride of antimony (butter of antimony), net weight, kilo.....	1.00
2319	2371	Chlorides of barium and strontium, net weight.....kilo..	.35
2320	2372	Chloride of lime, hypochlorite or lime, gross weight, kilo.....	.10
2321	2373	Chloride of calcium, pure, in crystal or mass, net weight, kilo.....	1.00
2322	2374	Chloride of calcium, impure, in iron cylinders, for ice machines, gross weight.....kilo..	.10
2323	2375	Chloride of cobalt, net weight.....kilo..	2.00
2324	2376	Chloride or perchloride of iron, in mass or in solution, net weight.....kilo..	1.00

SECTIONS FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala tariff.		
			<i>Dollars.</i>
2325	2377	Chlorides of tin and zinc, solid or in solution, net weight, kilo .....	.50
2326	2378	Chloride of mercury (calomel) and bichloride of mercury (corrosive sublimate), net weight	1.60
2327	2379	Chloride of methyl, for ice machines, in metal vessel, gross weight .....	.10
2328	2380	Chloride of soda (Labarraque's liquor), and chloride of potash (Javelle water), in bottles up to one liter .. doz ..	3.00
2329	2368	Chlorine, in solution, and chemical compounds of chlorine, not specified, net weight .....	.50
2330	2362	Chlorodine, Brown's or other, in bottles up to 60 grams, dozen	2.00
2331	2367	Chloroform and traumaticine, net weight	1.80
2332	2342	Chocolates, medicinal, in cake or powdered, and Racahout des Arabes, including weight of container .. kilo ..	1.00
2333	2410	Chromates of potash, soda, lead, zinc, or any other compound of chromium, used as paint or dye, gross weight .....	.08
2334	2411	Chromium, metallic, net weight .....	.20
2335	2347	Cigarettes, medicinal, Chamico's or other makes, in boxes or packages, up to 15 cigarettes, dozen of boxes, kilo .....	.35
2336	2349	Cinchonine, net weight	10.00
2337	2295	Cinnamon, powdered, net weight	1.10
2338	2350	Citrates of lime, ammonia, iron, potash, and soda, net weight	1.15
2339	2351	Citrate of magnesia, powder, granulated, or in solution, effervescent or not, in package of at least 500 grams, net weight	1.25
2340	2352	Citrate of magnesia, as above, in packages of less than 500 grams, including weight of container	1.50
2341	2353	Citrate of lithia, net weight	5.00
2342	3254	Citrate of lithia, effervescent in bottles up to 60 grams	3.50
2343	2355	Civet and arbutine, net weight .....	.05
2344	2952	Cloth, silk, oiled or prepared with any other medicinal substance, not as a plaster, including weight of container	6.00
2345	2951	Cloths, medicinal or antiseptic (cotton, linen, or woolen cloths impregnated with boric, carbolic, or salicylic acid, iodine, iodoform, etc.). (<i>See</i> Lints.)	
2346	2953	Cloths, sparadrap. (<i>See</i> Plasters spread on cloth.)	
2347	2381	Cobalt, crystalized, in lump or powders (fly poison), net weight .....	.50
2348	2383	Collars, belts, and plates, electric or magnetic, any system or maker, net weight	4.00
2349	2384	Collidine and cryptidine, lepidine, and eosine (an aniline red), net weight	2.00
2350	2486	Collodion, medicinal or photographers', simple or compound, positive or negative, net weight	1.50

SECTIONS FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatama- lan tariff.		
			<i>Dollars.</i>
2351	2385	Collyria, of any maker or any composition, including weight of container..... kilo..	1.50
2352	2389	Colocynth, and other medicinal products, not specified, net weight..... kilo..	.40
2353	2390	Colors not poisonous, liquid or paste, for coloring foods, including weight of container..... kilo..	2.00
2354	2700	Composition, fire-extinguishing, gross weight..... kilo..	.05
2355	2392	Cones (inhalers), of menthol, including weight of container..... kilo..	8.50
2356	2393	Copaibates of iron, and others, including weight of container..... kilo..	.85
2357	2396	Coraline or Corsican moss, net weight..... kilo..	.50
2358	2397	Cordial of cascara, in bottles up to 180 grams..... dozen..	4.00
2359	2843	Corn cures, in vials up to 5 grams..... dozen..	1.25
2360	2363	Corodine, in bottles up to 60 grams..... dozen..	3.00
2361	2197	Cotton or other textile fiber, prepared for medicinal uses, including weight of container..... kilo..	.40
2362	2198	Cotton, medicinal (antiseptic or carbolated, borated, iodated, iodoformed, oiled, and the like), including weight of container..... kilo..	.75
2363	2404	Cream of bismuth, any maker's, in bottles up to 125 grams, dozen.....	4.00
2364	2405	Cream, laundry, gross weight..... kilo..	.15
2365	2406	Cremor tartar (cream of tartar), crude or impurified, net weight..... kilo..	.10
2366	2407	Creoline, net weight..... kilo..	1.00
2367	2408	Creosote (kreosote), white or yellow, net weight..... kilo..	2.15
2368	2413	Croton chloral, net weight..... kilo..	8.00
2369	2412	Crotonol, net weight..... gram..	.03
2370	2415	Cubebs, whole, net weight..... kilo..	.85
2371	2416	Cubebs, powdered, net weight..... kilo..	1.30
2372	2989	Cupping instruments, rubber and glass..... dozen..	1.50
2373	2990	Cupping glasses..... dozen..	.50
2374	2394	Cups, quassia, net weight..... kilo..	2.25
2375	2395	Cups, glass or porcelain, for eye baths..... dozen..	.30
2376	2419	Curarine (medicine so called), and other specifics against animal poison, in vials up to 125 grams..... dozen..	4.00
2377	2345	Cyanide, red, of potassium, net weight..... kilo..	.40
2378	2346	Cyanide of iron (Prussian blue), net weight..... kilo..	.40
2379	2343	Cyanides, hydrocyanates or prussiates, of potash, mercury, and zinc, net weight..... kilo..	.65
2380	2420	Depilatories, including weight of container..... kilo..	1.00
2381	2421	Dermatol (subgallate of bismuth), net weight..... kilo..	18.00
2382	2423	Dextrine, white or yellow, net weight..... kilo..	.25
2383	2425	Diastase or maltine, net weight..... kilo..	20.00
2384	2426	Dithiosalicylate of soda, net weight..... kilo..	10.00
2385	2424	Dittany, of Crete, and white dittany or fraxinella, net weight..... kilo..	.35
2386	2566	Drops, Japanese and oriental, in vials up to 15 grams, dozen.....	2.50

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2387	2567	Drops, Livonian. (<i>See Capsules, medicinal</i>).	
2388	2568	Drops, medicinal, of any maker, not specified, in vials up to 15 grams .....dozen..	3. 00
2389	2569	Droppers, medicine, any shape or style .....dozen..	1. 00
2390	2427	Drugs, medicinal, not specified, and unlike any mentioned in this tariff, net weight.....kilo..	1. 00
2391	2428	Duboisine, net weight .....gram..	. 90
2392	2956	Earth, colored or white, for paints, gross weight...kilo..	. 08
2393	2429	Eikonogen, photographers', net weight .....kilo..	3. 00
2394	2431	Electuaries, medicinal, such as prepared theriaca, net weight.....kilo..	1. 50
2395	2432	Elixir, expectorant, Dr. Guille's, including weight of container.....kilo..	. 80
2396	2433	Elixir of pepsin, papaine, peptone, and other digestive elixirs and wines, as that of Tisy, in bottles up to 360 grams .....dozen..	4. 00
2397	2434	Elixir and wine of coca, and of boldo, in bottles up to 360 grams .....dozen..	3. 00
2398	2435	Elixir of jaborandi, in vials up to 60 grams .....dozen..	1. 50
2399	2436	Elixir (dentifrice) of the Benedictines, and Harris', in vials up to 30 grams .....dozen..	3*00
2400	2437	Elixirs, polybromurated, Baudry's and others, in bottles up to 360 grams .....dozen..	5. 00
2401	2438	Elixirs, dentifrices, not named, or tooth washes, including weight of container .....kilo..	1. 00
2402	2439	Embrocations, English and others, liniments, fomentations, and lotions, medicinal liquids, not specified, including weight of container .....kilo..	1. 50
2403	2444	Emetine, white or gray, net weight .....gram..	. 05
2404	2410	Emulsion of tar, in bottles up to one litre .....dozen..	. 40
2405	2441	Emulsions and milks, medicinal, not specified, in bottles up to 250 grams .....dozen..	3. 00
2406	2454	Encaustic for pavements, and oilcloth for floors, net weight .....kilo..	. 25
2407	2508	Eugenol, sulphonal, and hydroquinine, net weight...kilo..	6. 00
2408	2338	Ergot, net weight.....kilo..	. 85
2409	2455	Ergotine and extract of ergot, net weight.....kilo..	7. 25
2410	2457	"Esencia maravillosa coronada," in vials up to 30 grams each .....dozen..	. 60
2411	2458	"Esencia maravillosa," in bottles of at least 500 grams, litre.....	1. 00
2412	2460	Essence, or essential oils, of lavender, bergamot, cinnamon, caraway, cajiput, clove, coriander, fennel, jasmin, juniper, lemon, orange, rosemary, rue, savin, sage, sassafras, and thyme, white or red, net weight...kilo..	3. 25
2413	2461	Essence, or essential oils, of wormwood, ginger, and sandalwood, net weight .....kilo..	9. 00
2414	2462	Essence, or essential oil, of bitter almonds and common laurel, net weight .....kilo..	12. 00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2415	2463	Essence or essential oil, of bitter almonds, artificial, net weight .....kilo..	3.00
2416	2464	Essence, or essential oil, of anise, mentha piperita, win- tergreen, and others not specified, net weight...kilo..	4.75
2417	2465	Essence, or essential oil, of cinnamon, chamomile, nerole, petit grain, and mustard, net weight.....kilo..	40.00
2418	2466	Essence, or essential oil, of ylang-ylang, patchouli, and valerian, net weight.....kilo..	24.00
2419	2467	Essence, or essential oils, of grains of paradise (mala- gueta), melissa, rose, geranium, and rhodium, net weight .....kilo..	8.00
2420	2468	Essence, or essential oil, of rose (attar or otto of rose), Turkish, net weight .....gram..	.10
2421	2469	Essence (spirits) of turpentine, gross weight.....kilo..	.25
2422	2470	Essences, or essential oils, mixed, or mixture of various essences, for making Florida water, cologne water, and the like, net weight .....kilo..	6.50
2423	2459	Essences of fruits, artificial, as pineapple, apple, straw- berry, raspberry, etc., net weight.....kilo..	2.50
2424	2492	Ether, acetic, pure or alcoholized for medicinal use, net weight .....kilo..	1.20
2425	2493	Ether, acetic, of amylic alcohol, net weight .....kilo..	4.00
2426	2494	Ether, butyric, pure, net weight.....kilo..	4.00
2427	2495	Ether, butyric, alcoholized, net weight .....kilo..	2.50
2428	2496	Ethers, amylic and methylic, net weight .....kilo..	4.00
2429	2497	Ethers, amylic and methylic, alcoholized, or fruit essences, net weight.....kilo..	2.50
2430	2498	Ether, hydrochloric, pure or alcoholized, net weight.kilo..	1.60
2431	2499	Ether, aenanthic or aenanthylic (essence of cognac), net weight.....kilo..	20.00
2432	2500	Ether, nitric or sweet spirits of niter, net weight...kilo..	1.00
2433	2501	Ether, sulphuric, pure or alcoholized, net weight...kilo..	.80
2434	2502	Ether, valerianic, medicinal, prepared with common alco- hol, net weight.....kilo..	14.00
2435	2503	Ether, valerianic, of amylic alcohol (fusel oil), net weight, kilo.....	4.00
2436	2504	Ether, valerianic, alcoholized, for fruit essences, net weight.....kilo..	2.50
2437	2505	Ethers not specified, net weight .....kilo..	3.00
2438	2506	Etherolates (distillations of sulphuric ether with various aromatic substances), medicinal, not specified, net weight.....kilo..	3.40
2439	2507	Ethiops (sulphide of mercury and antimony), net weight, kilo.....	2.00
2440	2509	Evonimine, net weight .....kilo..	17.00
2441	2510	Exalgine and phenacetine, net weight.....kilo..	16.00
2442	2511	Extracts, aqueous, mild, of aconite, wormwood, henbane, belladonna, borage, hemlock, colocynth, quassia, digi- talis, bitter-sweet, walnut, valerian, gentian, and guai- acum, net weight.....kilo..	3.00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2443	2512	Extracts of campeachy wood (logwood), annotto, and other extracts of dyewoods, and the like, net weight, kilo .....	.50
2444	2513	Extract of cantharides, etherous or alcoholic, net weight, kilo	20.00
2445	2514	Extracts of ipecacuanha, rhubarb, nux vomica, and fatty extract of hashish (haschisch), net weight kilo..	8.00
2446	2515	Extract of jalap, and resin of jalap, net weight kilo..	6.80
2447	2516	Extracts of lettuce, tridacium, Peruvian bark, simarouba, and sarsaparilla, net weight	4.50
2448	2517	Extract of licorice, net weight .....	.60
2449	2518	Extracts of opium, saffron, and strofantus, net weight, kilo	25.00
2450	2519	Extract of malt, pure or mixed with other medicinal substances, in bottles weighing up to one-half a kilo, dozen	6.00
2451	2520	Extract of malt, pure or mixed with other medicinal substances, in bottles up to 250 grams dozen..	3.20
2452	2521	Extract of malt, dried, commonly called powdered malt, net weight	1.30
2453	2522	Extract of valerian, Brown's, in vials up to 30 grams, dozen	1.50
2454	2523	Extracts, aqueous, soft, not specified	3.20
2455	2524	Extracts, fluid, aqueous or alcoholic, pay one-half the duties of the corresponding soft extracts.	
2456	2525	Extracts, dry, pay one-half more than the corresponding soft extracts	
2457	2526	Extract, etherous, of male fern, net weight	26.00
2458	2527	Extracts, etherous, not specified, pay double the duty of the corresponding soft extracts.	
2459	2528	Extracts, fluid, of edible plants (such as ginger), for the preparation of sparkling waters and beverages, net weight	2.00
2460	2529	Extract of buchu, Helmbold's, and Pond's extract, in bottles	6.00
2461	2344	Ferrocyanide of potassium, net weight .....	.30
2462	2535	Fibrin or gluten, including weight of container .....	.50
2463	2671	Filings, grains and shavings, of copper, net weight. kilo..	.20
2464	2672	Filings, grains and shavings, of tin, net weight kilo..	.15
2465	2536	Filters of felt or asbestos, net weight .....	.50
2466	2715	Flies, Milan (fly blisters)	1.30
2467	2588	Flours and fecula, edible, mixed with some medicinal substances, gross weight .....	.25
2468	2589	Flour (meal), linseed, pays double the duty of the seed.	
2469	2537	Flowers of lavender, gross weight .....	.20
2470	2538	Flowers of mullein, mallows, camomile, rose, pellitory, elder, lime tree, with or without leaves, and other flowers not specified, including weight of container, kilo .....	.45

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan. tariff.		
			<i>Dollars.</i>
2471	2539	Flowers of nutmeg (mace), including weight of container, kilo .....	.75
2472	2540	Flowers of kousso, including weight of container. .kilo..	3.25
2473	2541	Flowers of violet, including weight of container...kilo..	.65
2474	2543	Fluorides of potassium and of sodium, net weight..kilo..	2.00
2475	2542	Fluorine in chemical compounds not specified, net weight.....kilo..	1.50
2476	2391	Freezers or refrigerators: Class I. Ice machines or apparatus freezing by means of a very volatile liquid (ether, ammonia, methyl chloride, etc.) (<i>see</i> Machines). The liquids them- selves will pay the duties marked in this tariff. Class II. Those which freeze by the use of ice or freezing mixture, of whatever material construct- ed, gross weight.....kilo..	.25
2477	2550	Fruit preparations, purgative, as Tamar-Indian, Guil- lon's, or Julien's, and other makers, in bottles of at least half a kilo, net weight.....kilo..	5.00
2478	2551	Fruit preparation (the same), in bottles or boxes of 12 fruits .....dozen of bottles..	2.50
2479	2552	Fucus, not medicinal, not specified, net weight....kilo..	.10
2480	2177	Galls (gallnuts, nutgalls), of Aleppo or the levant, and divi-divi, net weight.....kilo..	.45
2481	2793	Galvanic batteries and their loose parts (without the salts or acids used with them), any system or make, gross weight.....kilo..	.05
2482	2333	Gambier, cutch or terra Japonica, net weight.....kilo..	.55
2483	2553	Gases, all kinds, dissolved in any liquid except water, pay the duty of the liquid.	
2484	2554	Gas, laughing (nitrous oxide), in its proper metallic re- ceptacles (weight of these included) .....kilo..	.50
2485	2555	Glycerine white or yellow, in cans of at least 1 liter, net weight .....kilo..	.30
2486	2556	Glycerine in bottles of at least 250 grams, net weight, kilo .....	.40
2487	2557	Glycerolates, medicinal, any composition, net weight, kilo .....	.50
2488	2736	Gold, spongy, for dentists, and in powder for gilding, net weight .....gram..	.20
2489	2257	Gold beaters' skins, gummed or ungummed, in leaves or sheets, including weight of container.....kilo..	8.00
2490	2581	Goudron, Guyot's, and tar water, in bottles up to 250 grams .....dozen..	2.25
2491	2572	Grains of Paradise (Guinea pepper), net weight....kilo..	.50
2492	2573	Granules, dosimetric, in bottles or cans of at least 250 grams, net weight.....kilo..	8.20
2493	2574	Granules, dosimetric, in bottles of less than 250 grams, including weight of container .....kilo..	8.00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2494	2575	Granules or globules, homeopathic, saccharine, net weight kilo..	4.00
2495	2576	Granules or globules, homeopathic, active or impregnated, in packages of at least 250 grams, net weight, kilo	12.50
2496	2577	Granules or globules, as above, in bottles or packages of less than 250 grams, including weight of container, kilo	8.00
2497	2232	Grape sugar (glucose), natural or artificial, net weight, kilo .....	.10
2498	2578	Grease (fat) or butter, animal, medicinal, net weight. kilo..	1.00
2499	2579	Grease or butter, mineral, soft consistency, dark or brown, with smell of petroleum, gross weight kilo..	.10
2500	2580	Guaiacol, net weight..... kilo..	12.00
2501	2774	Guaraná, in packages of less than 250 grams, including weight of container kilo..	5.50
2502	2845	Gum, tacamahaca, net weight..... kilo..	.85
2503	2846	Gum, thapsia, net weight..... kilo..	10.00
2504	2560	Gum arabic, white, natural or artificial, net weight. kilo..	.65
2505	2561	Gum arabic, yellow, regular and dragon's blood, net weight kilo..	.45
2506	2562	Gum arabic, mixed, white, and yellow, net weight. kilo..	.55
2507	2563	Gums, benjoin and myrrh, net weight kilo..	1.10
2508	2564	Gums, anine, copal, damar, euphorbium, olibanum, and shellac, gross weight kilo..	.40
2509	2265	Gums and resins, powdered, pay 30 per cent more than the same not pulverized.	
2510	2559	Gums and resins pay duties as follows: (a) Mastic, galbanum, guaiacum, labdanum, and sagapenum, net weight kilo..	2.15
		(b) Tragacanth, bedellium, elemi, ammonia, asafoetida, andarach or juniper, opoponax, gamboge, and, other gums and resins not specified, net weight, kilo .....	.85
2511	2582	Gutta-percha, crude or in pieces, net weight kilo..	.75
2512	2583	Gutta-percha, manufactured in articles for photographers, chemists, and pharmacists, such as funnels, pans, pails, test tubes, baths, including weight of container, kilo	1.00
2513	2584	Gutta-percha, in thin sheets and safety cloth, all kinds, including weight of container kilo..	2.00
2514	2844	Hair-restorers (patent medicines for baldness, etc.), and hair dyes, any kind, in boxes, bottles, or any common package, including weight of container kilo..	2.00
2515	2590	Headline, in any package, gross weight kilo..	.80
2516	2430	Hellebore, white, root, net weight kilo..	.65
2517	2592	Hematozine or hematine, and solveol, net weight kilo..	.80
2518	2593	Hemoglobine, net weight kilo..	6.00
2519	2609	Hippurates of lime, lithis, potash, and soda, net weight, kilo	15.00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2520	2614	Homatropine and ergotine, net weight gram..	1.00
2521	2594	Hydrastinine, net weight kilo..	.50
2522	2595	Hydrate of chloral, net weight..... kilo..	2.60
2523	2596	Hydrate of spirits of turpentine, and turpinol, net weight, kilo	5.00
2524	2591	Hydrate of amylene, or dimethylethylic carbinol, net weight..... kilo..	8.00
2525	2365	Hydrochlorophosphate of lime, in powder or cake, net weight..... kilo..	1.25
2526	2366	Hydrochlorophosphate of lime, in solution, for sirups, net weight..... kilo..	.50
2527	2925	Hydrosulphate of ammonia, net weight kilo..	.50
2528	2610	Hypophosphites and phosphites of ammonia, lime, iron, potash, and soda, net weight..... kilo..	8.00
2529	2611	Hyposulphites and sulphites of ammonia, lime, and mag- nesia, net weight kilo..	.80
2530	2612	Hyposulphites and sulphites of potash and soda, net weight kilo..	.10
2531	2616	Ichthyol, net weight..... kilo..	7.20
2532	2617	Indigo, net weight..... kilo..	.40
2533	2618	Inhalers, for medicinal gases or vapors dozen..	2.80
2534	2622	Injections, Brou's, Caba's, Chable's, of matico, or any other injection not specified, in bottles up to 250 grams, dozen	6.00
2535	2623	Injections, hypodermic, liquid or in pastilles, or other form, including weight of container kilo..	16.00
2536	2619	Instruments, surgical, not specified, including weight of container kilo..	1.00
2537	2620	Instruments, dental, not specified, including weight of container kilo..	1.50
2538	2625	Iodides of sulphur, iron, lead, potassium, sodium, and zinc, net weight kilo..	4.50
2539	2626	Iodide of starch, net weight kilo..	5.00
2540	2627	Iodide of mercury, proto and deuto, net weight.... kilo..	10.00
2541	2624	Iodine, iodol, iodoform, and other chemical compositions of iodine not specified, net weight kilo..	8.00
2542	2597	Iron, dialized, Bravais, or Grimault's, in vials up to 60 grams dozen..	3.00
2543	2598	Iron, dialized, Wyeth's or others, in bottles up to 125 grams dozen..	3.00
2544	2599	Iron, dialized, of any maker, in bottles of more than 125 grams, net weight..... kilo..	2.00
2545	2600	Iron, lactate, citrate, and tartrate of, net weight kilo..	4.00
2546	2601	Iron, in fine filings, net weight kilo..	.30
2547	2602	Iron, protoxalate of, Giard's, in vials up to 15 grams, dozen	2.00
2548	2603	Iron, reduced by hydrogen, net weight..... kilo..	3.00
2549	2604	Iron, in powder or porphyriized, net weight kilo..	.85
2550	2382	Isinglass, edible gelatin, grenatine, in sheets or fibers, including weight of container kilo..	.80

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2551	2636	Jalapin, white or brown, net weight..... kilo..	10.50
2552	2637	Jellies, gelatines, and pastes, medicinal, not specified, including weight of container..... kilo..	1.50
2553	2650	Juices of medicinal plants, pay duties as extracts.	
2554	3000	Juices, compound, medicinal, pay duty as extracts not specified.	
2555	2651	Kaolin, washed, powdered, gross weight..... kilo..	.05
2556	2652	Kumiss (koumiss) and kefir..... liter..	.50
2557	2850	Labels, for jars and bottles, druggists pay as follows:	
		(a) If crystal, porcelain or metal, with or without ornament or gilding..... hundred..	4.00
		(b) If paper or other like substance, with or without ornaments..... hundred..	1.50
2558	2851	Labels for druggists' prescriptions. (See Labels.)	
2559	2654	Lactate of iron, net weight..... kilo..	4.00
2560	2655	Lactate of lime, magnesia, manganese, and soda, net weight..... kilo..	2.00
2561	2656	Lactophosphate of lime, net weight..... kilo..	2.00
2562	2657	Lactopeptin, net weight..... kilo..	20.00
2563	2658	Laminaria digitata, boxes of one dozen..... box..	.75
2564	2661	Lanoline, net weight..... kilo..	1.20
2565	2660	Laudanum, Sydenham's, Rousseau's, and others, and tincture of opium, net weight..... kilo..	1.80
2566	2613	Leaves and herbs, herbane, belladonna, beldo, borage, buchu, capillaria, damiana, hemlock, stramonium, digitalis, bitter-sweet, male fern, savin, sage, sen, taraxacum, and other medicinal leaves and herbs not specified, including weight of container..... kilo..	.50
2567	2663	Leptandrine, net weight..... kilo..	11.00
2568	2674	Lichen or Iceland moss, net weight..... kilo..	.50
2569	2667	"Licor de las damas" (ladies liquor), in bottles up to 250 grams..... dozen..	9.00
2570	2673	Liniments, Kosen's, and others, including weight of container..... kilo..	1.50
2571	2605	Lint, belts, and bandages, cotton, for surgical uses, including weight of container..... kilo..	.50
2572	2606	Lint, belts, and bandages, linen, including weight of container..... kilo..	1.00
2573	2607	Lint, bandages, and gauzes, cotton, prepared with medicinal or antiseptic substances, including weight of container..... kilo..	.80
2574	2608	Lint, bandages, and gauzes, linen or woollen, prepared with medicinal or antiseptic substances, including weight of container..... kilo..	1.30
2575	2675	Liquid or liquid of myrtle berries, for coloring wine, net weight..... kilo..	1.25
2576	2676	Lisol, net weight..... kilo..	2.00
2577	2677	Listerine, in bottles, up to 500 grams..... dozen..	6.00
2578	2653	Litmus, net weight..... kilo..	1.00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
2579	2747	Logwood, and other dye woods and roots, not specified, in shavings, powder, or sawdust, gross weight... kilo..	.05
2580	2250	Lotions, medicinal, not specified, mineral lotions of Chablé, in packages or flasks, gross weight..... kilo..	.85
2581	2771	Lozenge machines, spring, for making lozenges one at a time .....	.25
2582	2772	Lozenge (pastille) machines, for druggists, gross weight, kilo .....	.05
2583	2678	Lupulin, net weight..... kilo..	4.00
2584	2666	Lycopodium and kamala, net weight..... kilo..	1.10
2585	2695	Machines, instruments, and utensils, especially or solely used in pharmaceutical laboratories, such as pastille and pill machines, utensils for making wafers, capsules, etc., except those elsewhere specified, gross weight, kilo .....	.05
2586	2696	Machines, apparatus, and their appurtenances, for making, transporting, and serving gaseous waters, as: First class: A. Machines for making gaseous waters in large quantities, whether of continuous or intermittent action, imported separately, gross weight, kilo .....	.04
		First class: B. Apparatus of glass for preparing gaseous water in small quantities, as Briet's generator, and others .....	.50
		Second class: A. Tank and receptacles of metal, of many gallons capacity, for holding and transporting gaseous water, including tubes and faucets to connect them with the generators, gross weight, kilo .....	.10
		Second class: B. Siphon bottles, glass, any kind and make, for holding and transporting gaseous water for sale by retail, gross weight..... kilo..	.20
		Third class: A. Soda-water fountains, marble, granite, or other stone, including refrigerator, glass receptacles for sirups, faucets and tubes, and ornaments of white or yellow metal, all imported together, gross weight..... kilo..	.20
		Third class: B. Fountains of white or yellow metal, fancy, any shape, for show and sale of gaseous waters, including marble slab for apparatus, lamp, statue, or other ornamental object, and the connection tubes and faucets, gross weight kilo..	.35
		Loose parts and repairs for all these machines and apparatus for gaseous waters, as well as the glasses and holders for serving the water, will pay the duties designated in this tariff, according to the material of which they are composed. The same may be said of the acids, salts, and other materials for making gaseous water.	

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
2587	2697	Machines, electro-medical, with or without the salts used with the same, net weight kilo..	1.00
2588	2698	Machines, apparatus, and instruments not specified, for dentists, net weight kilo..	1.50
2589	2699	Machines, apparatus, and utensils, not specified, for photographers, gross weight kilo..	.50
2590	2684	Mackintosh (antiseptic cloth), including weight of container kilo..	1.30
2591	2680	Magnesia, calcined (oxide of magnesium), in bottles of at least 250 grams weight kilo..	1.00
2592	2681	Magnesia, calcined, Henry's, or imitation, in bottles of less than 250 grams, gross weight kilo..	1.20
2593	2682	Magnesia, liquid, in any package, gross weight kilo..	.25
2594	2683	Magnesium, metallic, in threads, sheets or shavings, net weight kilo..	5.00
5995	2685	Malt, roasted or unroasted, gross weight kilo..	.01
2596	2690	Manna, in sticks or tears, net weight kilo..	1.30
2597	2691	Manna, regular, (white broken manna), net weight . kilo..	.75
2598	2692	Manna, oily (commonly called black manna), net weight, kilo.....	.50
2599	2693	Mannite and glycirrizine (licorice sugar), net weight, kilo.....	3.00
2600	2705	Matches and tapers, medicinal and disinfectant, net weight kilo..	.20
2601	2704	Mate (Paraguay tea), net weight kilo..	.75
2602	2709	Medicine veterinary, not specified, including weight of container kilo..	1.50
2603	2275	Medicine chest and cases, allopathic, dosimetric, and homeopathic, pay duties as follows: Chest or case, empty each ..	2.00
		The medicines they contain will pay according to quality, kind, and weight, as per this tariff.	
2604	2321	Medicine cases, pocket, with vials; for the duty on the cases, see Pocket books. The medicines will pay duties according to kind and quantity.	
2605	2662	Milk, antiophelic, Candés', and others (a lotion for the cure of freckles, etc.), including weight of container, kilo.....	1.00
2606	2712	Mixture, Hernandez's, for mosquito bites, in vials up to 60 grams dozen..	1.00
2607	2474	Mixtures, medicinal, of medicinal plants or parts of plants in fine pieces, including weight of container kilo..	1.00
2608	2475	Mixtures, fumigating, of odorous resins, and other aromatics, net weight kilo..	.75
2609	2387	Mixture of sulphuric acid and bichromate of potash, for galvanic batteries, net weight kilo..	.20
2610	2710	Molasses (<i>melaza</i>), gross weight kilo..	.03
2611	2711	Molasses (<i>melaza</i>), burnt or sugar-burnt (caramel), for coloring liquors, gross weight kilo..	.05
2612	2714	Morruol, net weight kilo..	4.50

SECTIONS FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
2613	2713	Mortars, flint or agate, any diameter, with or without pestle.....each..	1. 00
2614	2716	Moss, Corsican (coralline), net weight.....kilo..	. 25
2615	2364	Muriate of quinine, net weight.....kilo..	10. 00
2616	2202	Musk, Tonquin, with or without bladder, net weight, gram.....	. 25
2617	2203	Musk, Canton, in the original tin pots, net weight, kilo.....	32. 00
2618	2204	Musk, artificial, net weight.....kilo..	60. 00
2619	2717	Naphthalene and anthracene, in crystals, net weight, kilo.....	. 50
2620	2718	Naphthalene, in small balls, or other shape, net weight, kilo.....	. 80
2621	2719	Naphthol, net weight.....kilo..	1. 20
2622	2720	Nickel, metallic, net weight.....kilo..	1. 00
2623	2688	Nipples (for nursing bottles), rubber.....gross..	2. 50
2624	2689	Nipples (for nursing bottles), of udder.....gross..	4. 50
2625	2789	Nipple shields, rubber.....dozen..	. 50
2626	2790	Nipple raisers, glass or rubber.....dozen..	3. 50
2627	2721	Nitrates of ammonia, baryta, copper, strontia, iron, lead, and zinc, net weight.....kilo..	. 40
2628	2722	Nitrate of potash, fused or crystallized (saltpeter)—(the importation of more than 10 kilos at one time is prohibited), net weight.....kilo..	. 40
2629	2723	Nitrate of mercury, liquid or crystallized, net weight, kilo.....	2. 00
2630	2724	Nitrate of silver crystallized or fused, in sticks, pure or mixed with other nitrates, net weight.....kilo..	24. 00
2631	2725	Nitrate of arranium, and ginocardate of magnesia, net weight.....kilo..	12. 00
2632	2726	Nitrate of amyl, and the like, net weight.....kilo..	2. 20
2633	2727	Nitroglycerine, medicinal (solution), net weight.....kilo..	3. 00
2634	2728	Nitroprussiates, or nitrocyanides of sodium or potassium, net weight.....kilo..	10. 00
2635	2686	Nursing bottles, glass, without tubes, gross weight.....kilo..	. 25
2636	2687	Nursing bottles, complete, or with their tubes and nipples.....dozen..	3. 00
2637	2730	Odontine, Pelletier's, and other medicinal tooth pastes, including weight of container.....kilo..	1. 00
2638	2731	Odontoid, for filling teeth, in bottles up to 150 grams, dozen.....	4. 00
2639	2134	Oils, poppy, cotton, ben, peanut, coco, rapeseed, palm, sesame, and other fixed oils extracted from seeds, not specified, and fish oils, in common vessels of any capacity, gross weight.....kilo..	. 10
2640	2135	Oil, almond, pure and genuine, in vessels of any capacity, gross weight.....kilo..	. 20
2641	2136	Oil, cod-liver, in emulsion, creosoted, with hypophosphites, iodine, quinine, or other medicinal substances, in vessels of any capacity, gross weight.....kilo..	. 20

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
2642	2137	Oils, cade (juniper), and Dippel's animal oil, net weight, kilo .....	.50
2643	2138	Oils, croton and euphorbia, net weight..... kilo..	6.00
2644	2139	Oil, disinfectant or carbolized, net weight..... kilo..	.40
2645	2140	Oil, electric, magnetic, and the like, including weight of container	1.50
2646	2141	Oil, nutmeg, or nutmeg butter, net weight..... kilo..	3.00
2647	2142	Oils, lubricating, animal or mineral, crude, for machinery, carriage axles, etc., in packages of less than 1 gallon, gross weight..... kilo..	.10
2648	2143	Oils, lubricating, mineral or animal, clarified, refined, or of superior quality for fine machinery, as sewing ma- chines, clocks, watches, etc., in vessels of any capac- ity, gross weight..... kilo..	.15
2649	2144	Oil, olive, real or imitation, in vessels of any capacity, gross weight..... kilo..	.10
2650	2145	Oil of petroleum (kerosene, naphtha) and gasoline, in any common package, gross weight..... kilo..	.05
2651	2146	Oil, castor, chaulmugra, all grades, in vessels of any ca- pacity, gross weight..... kilo..	.25
2652	2147	Oils, medicinal, standard, as camphorated oil, oil of euphorbia, phosphorated, oil, and the like, not specified, net weight..... kilo..	.50
2653	2148	Oils, for dressing leather, gross weight .....	.15
2654	2149	Oils, volatile or essential. (<i>See Essences</i>).	
2655	2976	Ointments and pomades, medicinal, any composition or maker, in packages of less than 500 grams, including weight of container..... kilo..	1.50
2656	2977	Ointments, medicinal, in packages of 500 grams and up- wards, net weight..... kilo..	2.00
2657	2978	Ointments, veterinary, as cresylic (tar ointment), net weight..... kilo..	.50
2658	2732	Oleates of lime, mercury, lead, soda, and zinc, net weight, kilo	1.50
2659	2733	Opium, solid, net weight	9.80
2660	2734	Opium, powdered, net weight..... kilo..	12.80
2661	2735	Orchil, net weight .....	.40
2662	2737	Oxalates of ammonia, strontia, potash, and soda, net weight..... kilo..	.60
2663	2738	Oxalates of iron, proto, and dento, net weight..... kilo..	2.00
2664	2739	Oxide of strontium (strontia), net weight..... kilo..	1.00
2665	2740	Oxides of iron, red, yellow, or black, for medicinal uses, net weight..... kilo..	.40
2666	2741	Oxide of manganese, powdered, net weight..... kilo..	.10
2667	2742	Oxide of mercury (red precipitate), net weight..... kilo..	1.60
2668	2743	Oxides of lead, yellow (litharge) and red (red lead), gross weight..... kilo..	.20
2669	2744	Oxide of zinc, or flowers of zinc, for medicinal uses, gross weight..... kilo..	.50

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
2670	2745	Oxide of zinc, impure (zinc white), for paint, gross weight kilo..	.08
2671	2442	Packages and vessels, unnecessary, when the contents do not pay on gross weight, pay separately.	
2672	2443	Packages and vessels, unsuitable, pay separately, even when the contents pay duty on gross weight.	
2673	2199	Pain-killer, Barry's, in bottles up to 60 grams.... dozen..	1.00
2674	2702	Pain-killer, Perry Davis's, in vials up to 30 grams. dozen..	1.00
2675	2746	Palladium, metallic, in shavings, sheets, wire, etc., net weight kilo..	5.00
2676	2748	Panacea, Swain's, or other, in bottles up to 500 grams, dozen.....	8.00
2677	2749	Pancreatin, pepsin, papain, papayotin, bromelin, and other digestive ferments, pure or mixed with other substantives, including weight of container kilo..	7.00
2678	2750	Panquimagogue, of quercetam, purgative, in bottles up to 300 grams dozen.....	7.00
2679	2751	Panquimagogue, emetic, in bottles up to 150 grams, dozen.....	2.25
2680	2752	Paper, epispatie, in sheets, boxes of one dozen, dozen of boxes.....	2.50
2681	2753	Paper (foil), tin or lead, including weight of container, kilo.....	.40
2682	2754	Paper, filter, gross weight..... kilo..	.20
2683	2755	Paper, medicinal, not specified, including weight of container..... kilo..	3.50
2684	2756	Paper, chemical, Fallard's, up to 15 centimeters wide, meter.....	.20
2685	2757	Paper, litmus, red and blue, of turmeric, or other, for reagents, including weight of container kilo..	.50
2686	2758	Paste, jujube, net weight kilo..	1.00
2687	2759	Paste, Marck's, for perfuming washes, including weight of container..... kilo..	1.00
2688	2760	Paste or pastilles of codeine or other alkaloid, including weight of container..... kilo..	2.00
2689	2761	Paste, phosphorated, for killing rats, including weight of container..... kilo..	2.00
2690	2762	Pastes, dentifrices, and toothache, not specified, including weight of container kilo..	1.00
2691	2763	Pastilles, sulphur, chlorate of potash, tar, ipecacuanha, tolu, vichy, and other medicinal pastilles, not specified, in packages of at least 250 grams, net weight.... kilo..	.45
2692	2764	Pastilles, as above, in packages of less than 250 grams, including weight of container..... kilo..	.30
2693	2765	Pastilles, simple, gum, lemon, mint, and other aromas, not containing medicinal substances, gross weight, kilo.....	.30
2694	2766	Pastilles (lozenges) of santonine, in packages of at least 250 grams, net weight kilo..	1.00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
2695	2767	Pastilles (lozenges) of santonine, in packages of less than 250 grams, and vermifuge lozenges of all kinds, including weight of container.....kilo..	.60
2696	2768	Pastilles, compressed, pay double the duties of the preceding, according to the substances they contain and the packages in which they are imported.	
2697	2769	Pastilles, compressed, called tablets, for hypodermic injections, including weight of container.....kilo..	16.00
2698	2770	Pastilles of secret composition, not specified, in packages of any quantity, including weight of container.....kilo..	2.00
2699	2773	Paulinia or guarana, powdered or in pastilles, in packages of at least 250 grams, net weight.....kilo..	6.50
2700	2783	Pearls, liquid, Kemp's, for the face, including weight of container.....kilo..	1.00
2701	2778	Pectal, net weight.....kilo..	4.00
2702	2775	Pectin, or vegetable jelly, pectic acid, and pectates of ammonia, potash, and soda, including weight of container.....kilo..	1.50
2703	2781	Pectonate of iron, net weight.....kilo..	1.10
2704	2779	Pectone, dry, net weight.....kilo..	4.00
2705	2780	Pectone, liquid, net weight.....kilo..	2.00
2706	2776	Pectoral, of anacahuitta, simple or compound, any maker, in bottles up to 250 grams.....dozen..	4.00
2707	2777	Pectorals, liquid, any maker, and any published composition, in bottles up to 250 grams.....dozen..	3.00
2708	2799	Pencils, for applying medicines to the eyes, ears, nose, etc., straight or curved, hair, sponge, or other material, dozen.....	.30
2709	2800	Pepper, cayenne, net weight.....kilo..	.80
2710	2784	Pernanganate of potash, net weight.....kilo..	1.00
2711	2785	Pessaries, rubber, with or without pump or ball of rubber, and tube for inflation.....dozen..	4.00
2712	2786	Pessaries, hard rubber, or other nonelastic material, round or oval.....dozen..	2.00
2713	2787	Pessaries, reversible, of aluminium or other metal.....dozen..	4.00
2714	2532	Phenolphthaleine and paramidophenol, net weight kilo.....	15.00
2715	2533	Phenol, Boleuf's, for medicinal use, and other like specifics, in bottles up to 150 grams.....dozen..	3.00
2716	2534	Phenol, Boboenf's, aromatic, including weight of container.....kilo..	1.00
2717	2544	Phosphates of ammonia, soda, potash, and magnesia, net weight.....kilo..	.45
2718	2545	Phosphate of lime, standard (calcined bones or staghorn), powdered or in troches, and precipitated phosphate of lime, net weight.....kilo..	.45
2719	2546	Phosphates and pyrophosphates of iron, and of iron and soda, and other chemical phosphorous compounds not specified, net weight.....kilo..	1.00

SECTIONS FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2720	2531	Phenylhydrasine, net weight .....kilo...	9.00
2721	2547	Phosphorous, white, and red or amorphous, net weight, kilo.....	1.00
2722	2701	Pill, blue (blue mass), Belloste's Bland's; cynoglossum, Vallet's, and others not specified, net weight..... kilo...	2.50
2723	2794	Pills, boluses, sugarplums (except those of santonine), granules or globules (except dosimetric and homeo- pathic), any maker, of composition, covered or not with sugar, gelatin, starch, or silvered; mixed or not with powders or cork dust; in packages of at least 250 grams, net weight kilo.....	7.50
2724	2795	Pills, etc., as above, in packages of less than 250 grams, including weight of container..... dozen.....	4.00
2725	2796	Pill tiles, simple, twelve grooves or less dozen.....	10.00
2726	2797	Pill tiles, with greater number of grooves will pay duty proportionally.	
2727	2798	Pilocarpine and its salts, net weight..... gram.....	.50
2728	2801	Piridine and pirodine, net weight..... kilo.....	2.00
2729	2788	Pitch, Burgundy, Castile, or other, for plasters, net weight kilo.....	.10
2730	2445	Plaster of any composition, in cylinders, net weight. kilo..	1.60
2731	2446	Plasters, adhesive, spread on cotton or linen cloth, up to 25 centimeters wide, not porous..... meter.....	.25
2732	2447	Plasters, adhesive, spread on cloth wholly or partly silk (court-plaster), up to 25 centimeters wide..... meter.....	.75
2733	2448	Plasters (adhesive), spread on cloth wholly or partly silk (court-plaster), in sheets, including weight of con- tainer..... kilo.....	8.00
2734	2449	Plasters, porous, including weight of container... kilo...	2.15
2735	2450	Plasters, of cantharidate of soda, up to 25 centimeters wide meter.....	2.00
2736	2451	Plasters, blistering, on oil cloth, such as Abbespeyres', Thapsia, etc., up to 25 centimeters wide..... meter.....	.60
2737	2452	Plasters, spread on paper, as cataplasms, sinapisms, etc., not specified, including weight of container..... kilo...	1.10
2738	2453	Plaster, corn, in boxes, including weight of container. kilo.....	4.00
2739	2804	Platinum, in wire, spongy, in sheets or powder, artificially prepared, net weight gram.....	.02
2740	2805	Plumbago (graphite, black lead), purified, in powder or in lumps, including weight of container kilo...	.10
2741	2806	Podophyllin, net weight kilo.....	6.30
2742	2987	Poison, bedbug, including weight of container kilo...	.80
2743	2988	Poison, called "Rough on rats," including weight of con- tainer kilo.....	1.00
2744	2817	Pomades, for toilet use, pay as perfumery, if put up in the same style, even if they contain some medicinal sub- stance.	
2745	2818	Potash, caustic, impure, for soap-making, gross weight, kilo.....	.10

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2746	2819	Potash, caustic, purified, in sticks or cakes, net weight, kilo	1.25
2747	2820	Potash, liquid (pure lye), net weight..... kilo..	.75
2748	2821	Potassium, sodium, barium, calcium, and other alkaline or earthy alkaline metals, not specified, net weight, kilo	2.20
2749	2822	Pots or boxes of glass, without ornament, or of crockery, with or without ornament, for pharmaceutical preparations, gross weight..... kilo..	.25
2750	2823	Pots or boxes of porcelain, plain or ornamented, or of glass, with labels, painting, or gilding, for pharmaceutical preparations, gross weight .....	.35
2751	2824	Pots or boxes of glass or crockery, without ornament, and of capacity not more than 250 grams, for pharmaceutical use, gross weight .....	.15
2752	2807	Powders, aperitive, Tarrant's or the like, as linosine, Eno's fruit salt, seidlitz, powder or granulated, in bottles up to 125 grams	5.00
2753	2808	Powders, nutritive, such as meat, flour or starch with milk, malt or phosphates, and other substances rather nutritive than medicinal, as Nestle's food, Falliers' phosphatine, etc., gross weight .....	.25
2754	2809	Powders, disinfectant, treated with carbolic or creosote, gross weight..... kilo..	.10
2755	2810	Powders, insecticide, with or without their respective blowers, in any customary package, including weight of container	1.50
2756	2811	Powders of gums and resins pay 30 per cent more than the same gums and resins in grain, mass, or lump.	
2757	2812	Powders, medicinal, not specified, of secret composition, any maker, for external or internal use, gross weight, kilo	8.00
2758	2813	Powders, medicinal, standard, or of known composition, as theriaca, etc., including weight of container... kilo..	4.00
2759	2814	Powders of medicinal salts and acids pay 20 per cent more than these salts and acids in crystals or lumps.	
2760	2815	Powders of mixed salts. (<i>See</i> Salts and Powders of Salts).	
2761	2816	Powders of vegetable substances, medicinal, such as leaves, roots, flowers, barks, woods, etc., pay 25 per cent more than these substances in their natural commercial state.	
2762	2388	Preparations (<i>confites</i>) of malt, pure or mixed, with other medicinal substances, including weight of container, kilo	1.50
2763	2825	Preservaline, gross weight .....	.50
2764	2826	Propylamine, its salts, and resorcine, net weight... kilo..	4.00
2765	2827	Pulps of canna-fistula and tamarind, net weight... kilo..	1.00
2766	2828	Pulps of any other fruit or medicinal plant, not specified, pay as extracts.	

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duties.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2767	2791	Pumice stone, powdered, gross weight kilo..	.05
2768	2802	Pyroxyline (gun cotton), net weight kilo..	1. 10
2769	2830	Quinine and sulphate of quinine, in vials of 30 grams or more, net weight kilo..	5. 00
2770	2831	Quinine and sulphate of quinine, in vials of less than 30 grams, net weight kilo..	6. 00
2771	2833	Quinium, pure or ordinary, net weight kilo..	6. 00
2772	2834	Quinium, Labarraque's (pays as wine of quina).	
2773	2832	Quinoidine, pure or crude, net weight kilo..	1. 50
2774	2414	Rennet, natural or artificial, in powder, pastilles, or other form, including weight of container kilo..	3. 50
2775	2847	Resin (rosin), pine or colophony, net weight kilo..	.02
2776	2848	Resinol or retinol, net weight kilo..	.40
2777	2214	Rings, teething, rubber, wood, bone, or ivory, any shape, not suitable for napkins dozen	1. 00
2778	2849	Robs, antisymphilitic, any make, in bottles up to 250 grams dozen	5. 00
2779	2835	Roots, acónite, angelica, cynoglossum, columba, tur- meric, gentian, ginger, licorice, soapwort, and vale- rian, net weight kilo..	.25
2780	2836	Roots, althea, orchanet, birthwort, large or round, col- chicum, galanga, and Florence orris, net weight kilo..	.40
2781	2837	Roots, arnica, Cohina, squill, pellitory, peony, tormen- tina, and turbit, net weight kilo..	.50
2782	2838	Roots, contraerva, dittany, jalap, and rhatany, net weight kilo..	.85
2783	2839	Roots, ipecacuanha, seneca, and serpentaria, net weight, kilo kilo..	1. 50
2784	2840	Root, Mechoacan, net weight kilo..	.20
2785	2841	Roots, rhubarb, common or Turkish, net weight kilo..	1. 20
2786	2842	Roots and bulbs, medicinal, not specified, net weight kilo..	.60
2787	2278	Rosin (pitch), vegetable, liquid or solid, net weight kilo..	.20
2788	2853	Saccharate of lime, net weight kilo..	.90
2789	2854	Saccharin and sucrol, net weight kilo..	34. 00
2790	2855	Saccharolates pay duty as medicinal pastes, as well as the saccharides, powder or otherwise.	
2791	2878	Salicine, net weight kilo..	4. 00
2792	2869	Salicylamide, somnal, thyol, and creosotal, net weight, kilo kilo..	10. 00
2793	2870	Salicylates of soda, and others not specified, net weight kilo kilo..	4. 25
2794	2871	Salicylate of bismuth, net weight kilo..	6. 00
2795	2872	Salicylate of bismuth and cerium, Vivas Perez's, includ- ing weight of container kilo..	6. 00
2796	2873	Salicylate of phenyl or salol, net weight kilo..	5. 50
2797	2874	Salicylate of guaiacol (guaiaco-salol), net weight kilo..	20. 00
2798	2875	Salicylate of pilocarpine, net weight gram..	.50
2799	2876	Salicylate of soda and theobroma, or diuretine gram..	.20
2800	2877	Salicylate of quinine, net weight kilo..	15. 00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala tariff.		
			<i>Dollars.</i>
2801	2879	Salipyrine (salicylate of antipyrine), alfol, betol or salynaphthol, and creosol, net weight.....gram..	.05
2802	2856	Salts and chemical compounds, ammoniacal, pure, not specified, net weight.....kilo..	.49
2803	2857	Salts, powdered, all kinds, pay 20 per cent more than the same in crystal, grains, or pieces, except those specified in powders.	
2804	2858	Salt, in grains, artificially made, effervescent or not, pay as powdered salts.	
2805	2859	Salts, copper, used in paints or dyes, net weight....kilo..	.08
2806	2860	Salts, prepared expressly for mineral waters, as Vichy, Apollinaris, and the like, net weight.....kilo..	4.30
2807	2861	Salts, double, and mixtures of salts with others, or with acids, pay the duty of the salt or acid which pays most.	
2808	2862	Salts, mixed, forming a specific of secret composition, not specified, gross weight.....kilo..	8.00
2809	2863	Salts and chemical compounds, not specified, having an alkaline base, pay the same duty as the alkaloid or base.	
2810	2864	Salts and chemical compounds, organic, not specified, and unlike those specified, gross weight.....kilo..	4.00
2811	2865	Salts of iron, used in paints or dyes, gross weight....kilo..	.08
2812	2866	Salts whose name is derived both from the acid and the base, will pay the duty of that of its components which pays the higher duty.	
2813	2867	Salts and chemical compounds, metallic, and the metals themselves, not specified, will pay duty by net weight, as follows:	
		(a) Of aluminium.....kilo..	.15
		(b) Of bismuth, cadmium, cerium, or lithium.....kilo..	1.50
		(c) Of copper (except those used in paints or dyes), of antimony, barium, strontium, tin, nickel, or zinc....kilo..	.50
		(d) Of chromine (except those used in paints and dyes).....kilo..	.20
		(e) Of iron, medicinal.....kilo..	.30
		(f) Of molybdenum and uranium.....kilo..	3.00
		(g) Of gold.....gram..	.25
		(h) Of platinum, iridium, osmium, and rhodium....gram..	.15
		(i) Of silver and palladium.....gram..	.10
		(j) Of lead, calcium, potassium, sodium, magnesium, and manganese.....kilo..	.30
		(k) Of thallium and cobalt.....gram..	.05
		(l) Of tungsten, mercury, titanium, and other metals not named.....kilo..	1.00
2814	2868	Salts of quinine, not specified, net weight.....kilo..	12.00
2815	2880	Sandal wood, red, in powder, net weight.....kilo..	.45
2816	2881	Santonine, in crystals or powder, net weight.....kilo..	25.00
2817	2997	Sarsaparilla, Brestol's, in bottles.....dozen..	5.00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2818	2998	Sarsaparilla, Ayer's, Bull's, Lanman's, Murray's, Towns- end's, and others, in bottles up to 360 grams ....dozen..	3. 00
2819	2241	Scales, Roberbal's, with wooden, marble, or metal case, or of these materials together, with their appurtenances, weighing one or more kilograms, gross weight....kilo..	1. 00
2820	2242	Scales (the same), medium, weighing up to one kilogram, gross weight.....kilo..	1. 25
2821	2243	Scales (the same), small, for prescriptions, with case of marble, crystal, or porcelain, with weights and appur- tenances.....each..	6. 00
2822	2244	Scales (the same), with wooden case, and wooden or mar- ble platform.....each..	4. 00
2823	2245	Scales (the same), with bronze standard, and appur- tenances.....each..	1. 50
2824	2456	Scammony, Smyrna, and other kinds, whole or powdered, net weight.....kilo..	3. 25
2825	2884	Seeds, fennugreek, including weight of container ....kilo..	. 25
2826	2885	Seeds, anise, green, gross weight.....kilo..	. 15
2827	2886	Seeds, anise, star (badiana), including weight of con- tainer.....kilo..	. 35
2828	2887	Seeds, caraway, including weight of container....kilo..	. 45
2829	2888	Seeds, musk (abelmusk), including weight of container, kilo.....	. 65
2830	2889	Seeds, cardamon, and cedron, including weight of con- tainer.....kilo..	1. 75
2831	2890	Seeds, lanskraut, including weight of container....kilo..	. 80
2832	2891	Seeds, linseed, fleawort, including weight of container, kilo.....	. 15
2833	2892	Seeds, lobelia, including weight of container.....kilo..	. 30
2834	2893	Seeds, mustard, yellow or black, including weight of con- tainer.....kilo..	. 20
2835	2894	Seeds, santonicum (wormseed), including weight of con- tainer.....kilo..	. 85
2836	2895	Seeds and berries, medicinal, not specified, including weight of container.....kilo..	. 25
2837	2896	Seeds and berries, medicinal, powdered, pay 25 per cent more than the duty on the same when whole, and all seeds and berries, powdered, whether medicinal or not, shall be considered medicinal, except such as are speci- fied among the POWDERS.	
2838	2897	Seeds of flowers and vegetables, imported whole, are free of duty, even if used in medicine.	
2839	2898	Seeds of cereals, powdered (<i>see FLOUR OF WHEAT, BAR- LEY, etc.</i>	
2840	2883	Selenium, metalloid, and its compounds, net weight.kilo..	5. 00
2841	2899	Silicates of potash, soda, and others not specified, white or colored, in mass or in solution, gross weight...kilo..	. 06
2842	2900	Silicon and its chemical compounds not specified, net weight.....kilo..	. 20
2843	2670	Silkworm gut, including weight of container.....gram..	. 01

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2844	2803	Silver, in wire or powdered, artificially prepared, for silver-plating, or in leaves for silvering pills, net weight.....kilo..	4. 00
2845	2628	Soap, ammoniacal (ammoniated liniment).....kilo..	1. 00
2846	2629	Soap, arsenical, for preserving anatomical specimens, or birds, including weight of container.....kilo..	1. 00
2847	2630	Soap, carbolic, sulphur, borax, coal-tar, corrosive sublimate, mercurial, or any other medicinal soap (soluble), simple or compound, not specified, in bars of at least 250 grams, gross weight.....kilo..	. 40
2848	2631	Soap, almond or medicinal, animal for opodeldoc, Castile, Marseilles, green, and other simple soda or potash soaps, used in pharmacy, in bars of at least 250 grams gross weight.....kilo..	. 25
2849	2632	Soaps, (above two classes), in cakes of less than 250 grams, wrapped or not in common paper, or in tin or lead foil, gross weight.....kilo..	. 40
2850	2633	Soaps, medicinal, of secret composition, in cakes, bars, or other form, gross weight.....kilo..	. 80
2851	2634	Soap, lead, in sticks, net weight.....kilo..	1. 60
2852	6635	Soaps, metallic (insoluble.) See METALS and their compounds not specified.	
2853	2902	Soda, caustic, salt, for soap, in cans or iron drums, gross weight.....kilo..	. 05
2854	2903	Soda, caustic, pure, net weight.....kilo..	. 50
2855	2668	Solution, Donovan's, net weight.....kilo..	2. 00
2856	2904	Solutions, medicinal, as Leras' solution of iron, solutions of chloride and lactate of strontia, and the like, in bottles up to 250 grams.....dozen..	2. 50
2857	2905	Solution, Laroyene's, in bottles up to 360 grams.....dozen..	6. 00
2858	2906	Solutions of alkaloids and their salts, and of other active medicinal substances, including weight of container.....kilo..	16. 00
2859	2909	Sozodont, Van Buskirk's, in bottles up to 125 grams, dozen.....dozen..	4. 50
2860	2910	Sozoiodol alkaline or metallic, net weight.....kilo..	20. 00
2861	2471	Spatulas, iron or steel, druggists'.....dozen..	2. 00
2862	2472	Spatulas, white metal, fine or common, or of ivory, dozen.....dozen..	2. 50
2863	2473	Spatulas, wooden, bone, horn, or hard rubber, and like substances.....dozen..	1. 25
2864	2476	Specifics (patent medicines) of secret composition, not specified or like those specified, including weight of container.....kilos..	3. 00
2865	2477	Specifics of known composition, not specified, or like those specified, including weight of container.....kilo..	2. 00
2866	2478	Spirits of musk, ambergris, orange-flower, cinnamon, patchouli, rose, and ylang-ylang, in bottles of at least half a litre.....litre..	8. 50

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2867	2479	Spirits of musk, ambergris, orange-flowers, cinnamon, patchouli, rose, and ylang-ylang, in bottles less than a half litre, including weight of container kilo..	1.00
2868	2480	Spirits of cochlearia, lavender, nutmeg, rosemary, and others, not specified, including weight of container, kilo	1.00
2869	2481	Spirits of hartshorn, net weight..... kilo..	.30
2870	2482	Spirits of vanilla (essence of vanilla), net weight..... kilo..	3.00
2871	2483	Spirits of wine (alcohol) litre..	1.60
2872	2484	Sponges, prepared with wax or with cord, including weight of container..... kilo..	6.00
2873	2485	Sponges, impregnated with medical or antiseptic substances, including weight of container..... kilo..	7.00
2874	2911	Spongiopilule, net weight..... kilo..	3.25
2875	2337	Squill, net weight..... kilo..	.50
2876	2201	Starch-polish, for laundress, gross weight..... kilo..	.15
2877	2486	Sterilizers (apparatus for sterilizing milk, and other liquids), will pay duty as articles not specified, according to the material of which they are made.	
2878	2706	Stockings of rubber; gloves, caps, ice-bags, belts, girdles, urinals, bandages of rubber or rubber with cotton or linen, for the use of the sick, including weight container kilo..	3.00
2879	2707	Stockings, and above articles, of rubber and wool, including weight of container kilo..	4.00
2880	2708	Stockings, and above articles, of rubber and silk, including weight of container..... kilo..	8.00
2881	2792	Stones, healing (standard preparations of this name); such as "piedra divina," health-stone, etc., except those specified elsewhere, net weight..... kilo..	2.00
2882	2943	Stoppers, rubber, gutta-percha, or like material..... dozen..	.50
2883	2912	Strofanthine and onabaine..... gram..	1.50
2884	2913	Strofantus hidispus, leaves and seeds; and onabaio, wood, root, or plant, net weight..... kilo..	3.50
2885	2914	Succinates of ammonia, potash, soda, and others not specified; benzonaphthol and sautonate of soda, net weight..... kilo..	6.00
2886	2231	Sugar of milk (lactose), net weight..... kilo..	.85
2887	2570	Sugarplums, comfits, etc., of santonine, in bottles of at least 500 grams, net weight..... kilo..	2.00
2888	2571	Sugarplums, comfits, etc., of santonine, in packages of less than 500 grams, including weight of container, kilo	1.00
2889	2233	Sugars, medicinal, including weight of container..... kilo..	1.50
2890	2915	Sulphaminol and asaprol, net weight..... gram..	.02
2891	2916	Sulphates of alumina, copper, iron (common), magnesia, and soda, including weight of container..... kilo..	.10
2892	2917	Sulphate of ammonia, pure, net weight..... kilo..	.10
2893	2918	Sulphate of baryta, and of lead for paint, gross weight, kilo .....	.08

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2894	2919	Sulphate of cadmium, net weight.....kilo..	2.00
2895	2920	Sulphate of lime, calcined, in powder (plaster for dentists and for figures), gross weight.....kilo..	.04
2896	2921	Sulphate of copper, ammoniacal, net weight.....kilo..	.20
2897	2922	Sulphate of indigo, net weight.....kilo..	1.50
2898	2923	Sulphate of mercury, white or yellow, net weight.kilo..	1.50
2899	2924	Sulphate of nickel, net weight.....kilo..	.60
2900	2932	Sulphide of antimony, acicular or crystalized, and sul- phide of carbon, net weight.....kilo..	.20
2901	2933	Sulphide of antimony, hydrated (mineral kermes), dia- phoretic antimony, yellow sulphur of antimony, net weight.....kilo..	3.25
2902	2934	Sulphide of arsenic, yellow (or piment), or red (realgar), and sulphides of lime, potash, and soda, solid or in solution, net weight.....kilo..	.40
2903	2935	Sulphide of iron, artificial, net weight.....kilo..	.10
2904	2936	Sulphide of mercury, black, net weight.....kilo..	.90
2905	2926	Sulphites and hyposulphites of ammonia, lime, and mag- nesia, net weight.....kilo..	.80
2906	2927	Sulphites and hyposulphites of potash and of soda, net weight.....kilo..	.10
2907	2930	Sulphocarbulates of soda, of zinc, and others not speci- fied, net weight.....kilo..	2.00
2908	2928	Sulphocyanides of ammonia and of potash, net weight, kilo.....kilo..	.70
2909	2929	Sulphocyanide of mercury, in powder or troches, includ- ing weight of container.....kilo..	1.50
2910	2931	Sulphovinate of soda, and others, net weight.....kilo..	1.00
2911	2234	Sulphur (brimstone), manufactured in matches or bougies, net weight.....kilo..	.20
2912	2235	Sulphur (brimstone), in roll or purified, net weight..kilo..	.10
2913	2236	Sulphur (brimstone), precipitated, net weight.....kilo..	.30
2914	2237	Sulphur (brimstone), sublimated, or flowers of sulphur, in powder, net weight.....kilo..	.15
2915	2238	Sulphur compounds, chemical, not specified, net weight, kilo.....kilo..	.40
2916	2999	Sumac and tannin extracts, impure, for tanning pur- poses, net weight.....kilo..	.30
2917	2937	Suppositories of butter of cacao, simple or compounded with medicinal substances, and vaginal suppositories, medicinal, including weight of container.....kilo..	2.50
2918	2276	Surgical cases, such as the so-called "Curación de Lis- ter," and the like, gross weight.....kilo..	1.00
2919	2938	Suspensories, cotton or linen.....dozen..	1.00
2920	2939	Suspensories, silk, pure or mixed.....dozen..	5.00
2921	2639	Syringes, family, of rubber, such as Crescent's Davis's, Alfa's, and the like, in wooden or pasteboard boxes, dozen.....dozen..	6.75
2922	2640	Syringes, hard rubber, with or without glass parts, with piston, including weight of container.....kilo..	3.00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
2923	2641	Syringes, piston, white metal or tin, including weight of container.....kilo..	1.00
2924	2642	Syringes, hypodermic, in boxes or metal cases, with or without thermometer attached.....each..	1.00
2925	2643	Syringes, bulb, rubber.....dozen..	2.25
2926	2644	Syringes, hanging or fountain, with rubber bag, in boxes of pasteboard or wood.....dozen..	12.00
2927	2645	Syringes, hanging or fountain, with tin box instead of bag.....dozen..	6.00
2928	2646	Syringes, with reservoir of glass or tin, for nasal douches, dozen.....	4.00
2929	2647	Syringes, spring, brass or white metal, including weight of container.....dozen..	1.00
2930	2648	Syringes, incomplete, pay the same duty as if complete.	
2931	2649	Syringes, glass, nasal, eye, urethral, vaginal, with cork or metal cap, including weight of container.....dozen..	.40
2932	2638	Sirups, conserves, and potions, medicinal, standard, of composition well known, or declared by their makers, except those specified, in bottles up to 250 grams, dozen.....	3.00
2933	2942	Talc, powdered, net weight.....kilo..	.20
2934	2940	Tannate of iron, net weight.....kilo..	1.00
2935	2941	Tannate of iron, compound, for making ink, including weight of container.....kilo..	.25
2936	2944	Tartrate, borico-potassic, net weight.....kilo..	.80
2937	2945	Tartrate of magnesia, and of iron, ammoniacal, net weight.....kilo..	1.00
2938	2946	Tartrate of potash and antimony (tartar emetic), and tartrate of potash and iron, net weight.....kilo..	1.50
2939	2947	Tartrate of potash, neutral, and of soda, net weight.....kilo..	.50
2940	2948	Tartrate of potash, acid (cremor tartar), net weight.....kilo..	.30
2941	2949	Tartrate (double) of potash and soda (Rochelle salt), net weight.....kilo..	.45
2942	2950	Tartrate of quinine, net weight.....kilo..	12.00
2943	2954	Terebene, net weight.....kilo..	1.10
2944	2955	Thiorosorcine, net weight.....kilo..	7.00
2945	2957	Tinctures of alkaloids (solutions of alkaloids in water, or alcohol, including weight of container.....kilo..	16.00
2946	2958	Tincture of musk and of other aromatic substances. (<i>See SPIRITS</i>).	
2947	2959	Tinctures, compound, standard medicinal, not specified, pay duty as medicinal wines.	
2948	2960	Tinctures, ethereal, pay duty as ethereal fluid extracts.	
2949	2961	Tincture of iodine, and of iodide of iron, net weight.....kilo..	2.10
2950	2962	Tincture, mother (medium), homeopathic, including weight of container.....kilo..	8.00
2951	2963	Tinctures and alcoholates, medicinal, simple, as tincture of belladonna, ipecacuanha, etc., pay duty as fluid extracts.	
2952	2964	Tincture of perchloride of iron, net weight.....kilo..	1.10

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Article.	Duty.
English transla- tion.	Guatema- lan tariff.		
			<i>Dollars.</i>
2953	2967	Tribromide of allyl, net weight.....gram..	.05
2954	2968	Tricopherus, Barry's, and Kemp's Oriental Tonic, their imitations, and like preparations, for the hair, in the usual bottles, including weight of container.....kilo..	1.00
2955	2969	Tripoli, net weight.....kilo..	.30
2956	2970	Triturations, homeopathic, any number, including weight of container.....kilo..	2.00
2957	2971	Trumpets, ear, wood or rubber.....dozen..	4.00
2958	2972	Trumpets, ear, metal.....dozen..	12.00
2959	2277	Trusses, all kinds and sizes, including weight of container.....kilo..	2.00
2960	2973	Tubes, rubber, vulcanized or not, two centimeters or less in outer diameter, net weight.....kilo..	3.00
2961	2974	Tubes, drain, rubber, including weight of container, kilo.....	2.00
2962	2975	Tubes, thin glass, straight, including weight of container, kilo.....	.25
2963	2965	Turpentine, common, gross weight.....kilo..	.05
2964	2966	Turpentine, purified, Venice, or other, net weight.....kilo..	.30
2965	2361	Ural, benzanilide, bromol, carbazol, net weight.....kilo..	12.00
2966	2979	Urates of ammonia, and of quinine, and phenyluretan, net weight.....kilo..	12.00
2967	2980	Urea, pure, and uretan, net weight.....kilo..	6.00
2968	2982	Valerianates of ammonia, in solution or dry, of bismuth, of iron, and of zinc, net weight.....kilo..	8.00
2969	2983	Valerianate of quinine, net weight.....kilo..	20.00
2970	2981	Vanilla, both kinds, net weight.....kilo..	.80
2971	2253	Varnish, alcohol, alcoholic solution of shellac or other resins and gums, gross weight.....kilo..	.50
2972	2254	Varnish of spirits of turpentine or benzine, and the like, gross weight.....kilo..	.25
2973	2255	Varnish of linseed oil or other drying oil, gross weight, kilo.....	.20
2974	2256	Varnish, painting or gilding, and gold varnish (bronze powder in solution of gutta-percha), including weight of container.....kilo..	1.00
2975	2984	Vaseline (petroline, petroleum jelly), white or yellow, in cans of 500 grams and upwards, net weight.....kilo..	.60
2976	2985	Vaseline in cans, pots, vials, or other packages of less than 500 grams, including weight of container.....kilo..	.45
2977	2983	Vaseline, liquid (oleonaphthaline), and neutraline, net weight.....kilo..	.75
2978	2991	Vermifuge, Jayne's, Vogeler's, or others, in bottles, including weight of container.....kilo..	.80
2979	2263	Vermilion, genuine Chinese, or imitation, in packages, including weight of paper and wrappings.....kilo..	2.00
2980	2264	Vermilion, French or English, or others, and vermilion of antimony, net weight.....kilo..	1.00
2981	2549	Vials, homeopathic, with or without corks, including weight of container.....kilo..	1.00

SECTION FIFTEENTH.—DRUGS, MEDICINES, CHEMICALS, ETC.—Continued.

Number of items in—		Articles.	Duty.
English translation.	Guatemala- lan tariff.		
			<i>Dollars.</i>
2982	2992	Vinegar, aromatic, and other medicinal vinegars, as camphorated, antiscorbutic, etc., in any package, including weight of container kilo..	1.00
2983	2993	Vinegar, white (dilute acetic acid), in glass vessels, gross weight kilo..	.20
2984	2729	Wafers, Limousin or imitation thousand..	1.00
2985	2251	Washes, metallic, for galvanizing, gross weight kilo..	1.00
2986	2187	Water, common laurel, net weight kilo..	.50
2987	2180	Water, distilled and oxygenated, gross weight kilo..	.25
2988	2181	Waters, distilled of orange flowers, rose, or other flowers, of leaves, roots, chips, seeds, barks, odorous fruits, and balsams, except otherwise specified, gross weight. kilo..	.20
2989	2182	Waters, Florida, Cologne, "del Carmen," lavender, "divina," and the like, in vessels of less than 1 litre, gross weight kilo..	1.00
2990	2183	Waters, Florida, Cologne, "del Carmen," lavender, "divina," and the like, in bottles or receptacles of 1 litre, including weight of container kilo..	.75
2991	2184	Waters, medicinal, standard, except Botot's, quinine, and other tooth washes, including weight of container. kilo..	.80
2992	2185	Waters, mineral, natural or artificial, in bottles up to 1 litre dozen..	1.00
2993	2186	Waters, mineral, natural or artificial, in bottles up to one-half litre dozen..	.50
2994	2339	Wax, yellow, soft wax for plasters and ointments, net weight kilo..	.10
2995	2994	Wines and elixirs of quinine, iron, and other medicinal wines and elixirs, not specified, of known composition, in bottles up to 360 grams dozen..	2.25
2996	2995	Wines, San Juan, San Rafael, or other like natural wines, advertised as medicinal, in bottles of 1 litre or half a liter litre..	.35
2997	2996	Wines, sour, pay as vinegar	
2998	2679	Woods, medicinal, not specified, in pieces or scrapings, net weight kilo..	.35
2999	2659	Wool, sterilized, including weight of container kilo..	.50
3000	2664	Yeast of beer, gross weight kilo..	.10

SECTION SIXTEENTH.—STORAGE DUES.

All articles of merchandise left in the warehouses of the respective custom-houses for more than one month, to be counted from the date on which they were landed, shall pay, under the head of storage dues, 2 cents per day per each 100 kilograms or fraction of that unit.

When the merchandise is left in the warehouses to await the result of some petition or of proceedings initiated in regard thereto, storage dues shall not be charged.

NOTES.

The kilogram is equivalent to 2.2046 pounds.

The gram represents 15.4324 grains.

The litre is equal to 1.0567 quarts.

The Guatemalan dollar, or peso, is equivalent in the gold coin of the United States, according to the valuation made by the Director of the Mint of the United States, on October 1, 1891, to 72.3 cents.



BUREAU OF THE AMERICAN REPUBLICS,

WASHINGTON, U. S. A.

- I. COMMERCIAL AND INDUSTRIAL INFORMATION.
- II. GOLD MINING IN BRITISH GUIANA—
CORRECTION OF NOVEMBER BULLETIN, 1893.
- III. IMPORT DUTIES OF GUATEMALA (REVISED).

BUREAU OF THE AMERICAN REPUBLICS,
NO. 2 LAFAYETTE SQUARE, WASHINGTON, D. C., U. S. A.

Director—CLINTON FURBISH.

While the utmost care is taken to insure accuracy in the publications of the Bureau of the American Republics, no pecuniary responsibility is assumed on account of errors or inaccuracies which may occur therein.

UNITED STATES CONSULATES.

Frequent application is made to the Bureau for the address of United States Consuls in the South and Central American Republics. Those desiring to correspond with any consul can do so by addressing "The United States Consulate" at the point named. Letters thus addressed will be delivered to the proper person. It must be understood, however, that it is not the duty of consuls to devote their time to private business, and that all such letters may properly be treated as personal and any labor involved may be subject to charge therefor.

The following is a list of United States Consulates in the different Republics :

ARGENTINE REPUBLIC—

Buenos Aires.
Cordoba.
Rosario.

BOLIVIA—

La Paz.

BRAZIL—

Bahia.
Para.
Pernambuco.
Rio Grande do Sul.
Rio de Janeiro.
Santos.

CHILE—

Antofagasta.
Arica.
Coquimbo.
Iquique.
Talcahuano.
Valparaiso.

COLOMBIA—

Barranquilla.
Bogota.
Cartagena.
Colon (Aspinwall).
Medillin.
Panama.

COSTA RICA—

San José.

DOMINICAN REPUBLIC—

Puerto Plata.
Samana.
Santo Domingo.

ECUADOR—

Guayaquil.

GUATEMALA—

Guatemala.

HAITI—

Cape Haitien.
Port au Prince.

HONDURAS—

Ruatan.

Tegucigalpa.

MEXICO—

Acapulco.

Chihuahua.

Durango.

Ensenada.

Guaymas.

La Paz

Matamoras.

Mazatlan.

Merida.

Mexico.

Nogales.

Nuevo Laredo.

Paso del Norte.

Piedras Negras.

Saltillo.

Tampico.

MEXICO—*Continued.*

Tuxpan.

Vera Cruz.

NICARAGUA—

Managua.

San Juan del Norte.

PARAGUAY—

Asuncion.

PERU—

Callao.

SALVADOR—

San Salvador.

URUGUAY—

Colonia.

Montevideo.

Paysandu.

VENEZUELA—

La Guayra.

Maracaibo.

Puerto Cabello.

BUREAU OF THE AMERICAN REPUBLICS.

DEPARTMENT OF STATE,

WASHINGTON, U. S. A., 1894.

DEAR SIR: It is impossible to comply with requests for the free distribution of the publications of this Bureau. The demand for Handbooks and Bulletins has increased so rapidly as to make compliance impossible, because of the limited editions published. The lists of applicants desiring to be supplied with every Handbook and Bulletin issued by the Bureau largely exceed any edition published, and these lists would be constantly increased if the requests received daily at the Bureau were acceded to. Yet, it is well understood that many requests are received from persons having good reasons for desiring the information asked for, and both willing and able to pay the slight cost of these documents.

Recognizing these facts, the Bureau some months ago issued a circular announcing that thereafter the publications of the Bureau would be sold to all applicants at a small price. This was done with a view of extending rather than limiting the circulation of the information published by the Bureau, and at the same time securing the utmost impartiality in such distribution. It was believed that this course would result in a more general circulation of the information secured in saving the unnecessary labor of replying to requests from persons who apparently had no special interest in the publications applied for, and that all who had a well-grounded intention of embarking in business in foreign countries, or extending business already established, would be able to afford the slight expense involved in the payment of the cost price of the Bureau documents.

The result of this experiment has more than justified the hopes with which it was undertaken. With exceptions too rare to be noted, the plan embraced in the circular has met with the cordial approbation of the business men of the country, and if the progress made thus far in extending the circulation of these publications shall be continued it will be possible to largely increase the numbers of each edition of future publications.

Many of the earlier Bulletins have been included in more recent publications. This applies especially to the tariffs, commercial directories and newspaper directories of the different Republics.

Suggestions from manufacturers and dealers as to their special needs of information will receive prompt attention by the Bureau.

The following list embraces a catalogue of the Bulletins and Handbooks published since the organization of the Bureau, of which copies may be secured by remitting to the undersigned the price named in enclosed list.

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49. Import Duties of Haiti.....	10
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CLINTON FURBISH,

Director.

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I.

COMMERCIAL AND INDUSTRIAL INFORMATION.

Colombia.

The last rails of the Cartagena-Magdalena railway were laid on June 3, and the line will probably be declared open for through traffic in connection with the Magdalena River, by July 15. This railroad is in the Republic of Colombia, and extends from Cartagena, on the Caribbean Sea, to Calamar, on the Magdalena River. This river, with its tributaries, is navigable for 500 miles, reaching nearly to Bogota, the capital, and drains a territory immensely rich in coffee, cacao, tropical fruits, and valuable woods of various kinds. The precious metals are also found in abundance.

It is believed that the facilities offered by the completion of this road will largely increase our present trade with that country.

The enterprise is owned by Americans.

The Chilean Government has issued a decree ordering all customs duties to be paid in gold.

A German company will shortly put on a fortnightly line of steamers between Buenos Ayres and English ports, making the voyage in fifteen days.

Over 1,000,000 bags of wheat were exported from the city of Buenos Aires during the first quarter of the present year.

The new port of Barrios, on the Atlantic coast of Guatemala, has been declared open for traffic. A pier 1,200 feet long, affording a

depth of water of 22 feet alongside, has just been finished; railway tracks extend the entire length of the pier, enabling vessels to load or unload their cargoes directly into the cars.

Barrios is the northern terminus of a railway, one-third of which is finished, designed to be extended to Guatemala City, the capital of the Republic.

When the line is finished the time of transit from ocean to ocean by this new Isthmian route will be ten hours. San José, on the Pacific, will be the southern terminus.

The plans of the North Peru Company for the irrigation of the valley of Piura have been approved. The scheme involves about \$5,000,000 of American capital.

II.

GOLD MINING IN BRITISH GUIANA.

(Correction of Bulletin, November, 1893.)

The item regarding "Gold Mining in British Guiana" published in the Bulletin of November, 1893, contains information which is alleged to be misleading. The item in question refers to the development of alleged gold mines in British Guiana. It is claimed on the part of Venezuela that these mines are located in territory over which England has no authority.

That a boundary dispute has existed between Venezuela and Great Britain for a long time is a matter of history, and not of opinion. The report inserted on page 16 of the November Bulletin of this Bureau, under the heading "Gold Mining in British Guiana" was published merely by way of commercial information, and there was in the item reference to no expression of opinion as to the boundaries or rights of either government. The information thus published was taken from a newspaper item conveying information of actual work in certain territory and referring to exports from Georgetown. For the reasons stated, no connection with the controversy between the Republic of Venezuela and Great Britain can properly be ascribed

to the publication in the Bulletin of this Bureau, nor can any unfavorable conclusion be drawn therefrom respecting the rights of Venezuela. That question still remains to be settled.

“O Minas de oro En la Guayana Inglesa.”

El artículo que se publicó en el Boletín correspondiente al mes de Noviembre de 1893, con el título de “Gold Mining in British Guiana,” ó *Minas de oro en la Guyana inglesa*, contiene manifestaciones que se han estimado susceptibles de recibir una interpretación equivocada. En ese artículo se habló del desarrollo que había tenido la industria por el descubrimiento de ciertas minas de oro que se dijo estaban situadas en la Guayana inglesa. Pero Venezuela reclama contra esta expresión y afirma que las minas de que se trata están situadas en un territorio sobre el cual nunca tuvo Inglaterra soberanía.

Es un hecho bien sabido, que pertenece á la historia y que no depende de opiniones particulares, el de que existe y está pendiente entre Venezuela y la Gran Bretaña, por lo que respecta á la Guayana, una cuestión de límites. Y si en la página 16 del citado Boletín de Noviembre se insertó el artículo á que se ha hecho referencia, encabezándolo “Gold Mining in British Guiana,” no se tuvo con ello el objeto de expresar opinión alguna respecto de los meritos de la controversia, ni aventurar juicio sobre los derechos del uno ó del otro Gobierno, sino se quiso simplemente dar publicidad á una noticia que se creyó de valor ó importancia para el comercio.

Los datos que contiene el artículo se tomaron de una publicación en que se daba cuenta de los trabajos de minería que se habían llevado á cabo en aquel territorio, y de las exportaciones efectuadas por Georgetown.

No puede, por lo tanto, establecerse relación ó conexión de ninguno clase directa ó indirecta, entre la referida publicación hecha por esta Oficina, en el Boletín de Noviembre último, y la controversia pendiente entre Venezuela y la Gran Bretaña. De nada que allí se haya dicho podrá nunca, por ningún concepto, derivarse ninguna conclusión, ni argumento, desfavorable á los derechos de Venezuela. El asunto estaba entonces, como lo está todavía, pendiente de resolución.





